Educational Executives' October 1961

OVERVIEW

A BUTTENHEIM PUBLICATION

SPECIAL REPORT on the men who control the purse strings of America's $26,500,000,000 educational budget and who occupy the fastest-growing position in administration: **THE BUSINESS OFFICIAL** This is the job... FINANCIAL PLANNING: Budget compilation Long-term fiscal planning Receipt estimates Budget control Fiscal relationships with other governmental units ACCOUNTING: General fund Capital reserve funds Trust funds Construction funds Internal accounts Student activity funds Voucher preparation Payroll preparation Inventory Attendance accounting Government tax accounting Pension accounting Special funds Trust funds Cost accounting DEBT SERVICE AND CAPITAL FUND MANAGEMENT: Long-term financing Short-term financing Maturities payments Debt payments Long-range capital programs Investments Reporting Bond register Note register Debt service payment procedures Local bonding credit data Bond prospectus Short-term debt management AUDITING: Preaudit procedures Internal auditing Postaudit procedures PURCHASING AND SUPPLY MANAGEMENT: Purchase methods Stock requisition Standards Specifications Purchase bids Purchase contracts Storage Delivery Trucking services Inventory control PLANT PLANNING AND CONSTRUCTION: Educational standards for sites Building standards Equipment standards Plant construction Plant equipment PLANT OPERATION: Custodial services Gardening services Engineering services Work standards Manpower allocations Work scheduling Work inspection Evaluation of service Relationship with educational staff Operation of related community facilities Community use of school facilities PLANT MAINTENANCE: Building repair Equipment repair Upkeep of grounds Maintenance policies Manpower scheduling Fund allocation Modernization Rehabilitation Replacement REAL ESTATE MANAGEMENT: Site acquisitions Site sales Site rentals Leases Rights of way Easements Assessments Taxes PERSONNEL MANAGEMENT: Probationary status Tenure status Sick leave Salary notices Retirement procedures Salary schedules Salary payments Tax withholding Group insurance Substitute employees Part-time employees Social Security Civil Service Supervision of non-instructional staff Personnel records Personnel reports RECORDS: Permanent property records Custody of legal papers PUPIL TRANSPORTATION: Policies Regulations Procedures Bus routing Bus scheduling Bus inspection Maintenance Evaluation Contracted equipment District-owned equipment FOOD SERVICE: Policies Regulations Procedures Staffing Supervision Menu control Price control Portion control Purchasing Accounting Cost analysis Coordination with educational program In-service training INSURANCE: Insuring policies Insurable values Policies Coverages Insurance records Claims records Insurance procurement Insurance distribution COST ANALYSIS: Unit costs Comparative costs Cost distribution studies REPORTING: Financial reports Statistical reports Required legal advertising Contact with public information media

PLUS: Air Conditioning / Culture Gap / School Shelters / Machine Records

Circle **OV-201** on reply card, last page

HOW MANY LIKE HIM WILL YOUR SCHOOL LOCK OUT?

Some Schools and Colleges are turning away a third of the students who come to their gates.

Others turn away a half.

And there are some who admit they can take only a tenth of those who apply for admission.

The reasons are usually the same: "Not enough money, not enough faculty, not enough space!"

Does your School need help? To raise money to solve growth problems calls for more than passing the hat among the alumni. It needs careful study and long-range planning. And that is where the AMERICAN CITY BUREAU assists. For we have helped solve money-raising problems for Educational Institutions, both large and small, since 1913!

Without obligation, one of our experienced Field Counsellors will be glad to make a Study of, and prepare a Plan to meet *your* special problems. Write our office nearest you today!

AMERICAN CITY BUREAU *Professional Fund-Raising Counsel for Almost Half-a-Century*

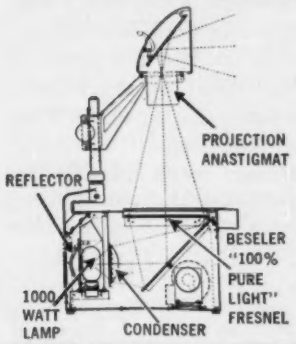
Chicago 1, Ill.	New York 16, N.Y.	Atlanta 9, Ga.	Houston 25, Texas	Sacramento 25, Calif.
3520 Prudential Plaza	386 Park Avenue South	1375 Peachtree St. Bldg.	1202 Prudential Bldg.	451 Parkfair Drive

Founding Member American Association of Fund-Raising Counsel

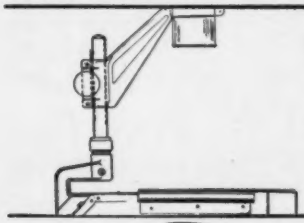
Circle OV-204 on reply card, last page

Why Does Everybody Call Overhead Projectors... VU-GRAPHS ?

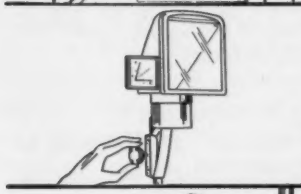
Because 90% of all overhead projectors in use today are Beseler Vu-Graphs . . .
and, because the quality standards for all overhead projectors are established by Beseler Vu-Graphs.
Let's prove this with a quick "nuts and bolts" examination of the overhead projector used in more schools than all others combined—the BESELER MASTER VU-GRAPH Overhead Projector . . .



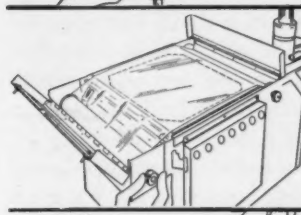
First, there's a superb optical system—special plastic Beseler Fresnel lens . . . 4" diameter 14" focal length f3.5 projection anastigmat objective (with low reflectance loss coating) . . . optically ground and polished 5" diameter condenser . . . and 1000 watt pre-focus lamp with 4½" reflector. **Result**—From a 10" x 10" transparency the Vu-Graph projects a sparkling crisp image, as large as 13' x 13', even in fully lighted rooms! And with the Beseler "100% pure light" Fresnel this image is uniformly brilliant from edge to edge . . . no "dirty" corners or "brown" pictures.



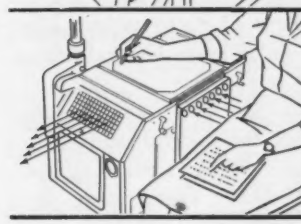
Next, there's the extra-short, offset projection head post with simple collet fitting. **Result**—Maximum lens rigidity providing vibration-free images . . . oversized transparencies can be used . . . assembling and disassembling is a snap.



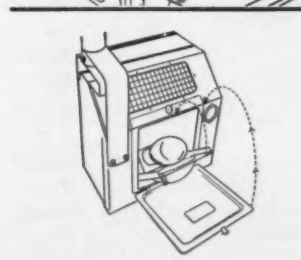
Focusing is rack and pinion operated, and a hinged rear view focusing mirror is part of the projection head. **Result**—Extremely fast, precise focusing . . . no need to turn head to check focus on screen.



The heavy acetate writing roll is **built-in. Result**—The Vu-Graph "Electric Blackboard" is always ready for use . . . no time-consuming changes or adjustments to make . . . and rolls may be removed at any time without going to the end.

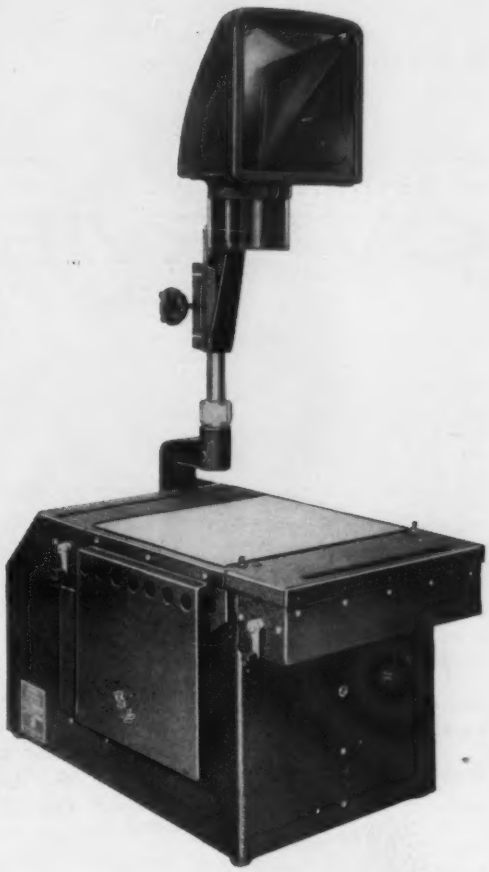


Cooled by a motor operated, shock-mounted centrifugal double blower. **Result**—Unlimited projection time without overheating . . . cooling is quiet and ultra efficient . . . hot air is exhausted away from, rather than into, face of operator.



Hinged access door and lamphouse. **Result**—Easy, instant servicing and lamp changing . . . no tools necessary . . . **no panels to lose.**

And the Vu-Graph has the most complete line of accessories available. **Result**—Versatility plus . . . use 3½ x 4, 2 x 2, 35MM filmstrips, tachistoscope, polarizing spinner, etc. with your Vu-Graph.



There are many, many more features we could point out on the Beseler Master Vu-Graph . . . but, we said this would be a "quick" examination, so we'd best stop here. If, however, you really want to know "Why Everybody Calls Overhead Projectors—Vu-Graphs"... write for complete information. Or, better yet, have a Beseler A-V Consultant bring a Vu-Graph to you for a real "nuts and bolts" examination.

CB PROJECTION DIVISION

CHARLES BESELER COMPANY
210 So. 18th Street, East Orange, New Jersey

LETTERS

Gobbledygook

Following a thorough ingestion of the collated data which Dr. Herman Spivey ["Gobbledygook: The Art of Non-Think," August OVERVIEW] related; and having reflected upon possible cultural symbology concerning the value-judgments on institutional patterns and means which might have effected a negative cathexis of his thought processes (an overview of his ethos as well was deemed advisable in light of certain prevalent, ongoing normative value-structures existing in the social group in question) this respondent concluded that any personal judgment placed on a continuum of intrinsic merit would be positive.

Translated, I was attempting to say that after reading Dr. Spivey's article, and having considered his responsible position, I felt that I should pass along orchids to him. I'm sure that his article will be welcomed by many of us who have tried to extract meaning from endless reams of "non-think." . . . Cheers to Dr. Spivey and his cult of "clear-think." . . .

DAVID C. FRENCH, Director, Audio-Visual Education, Fenn College, Cleveland, Ohio

I have carried with me a quotation I believe was attributed to Arthur Kudner of the advertising agency bearing his name. The following might well provide an interesting summary to Dr. Spivey's "Gobbledygook":

"Never fear big long words. Big long words name little things. All big things have little names. Such as life and death, peace and war. Or dawn, day, night, hope, love, home. Learn to use little words in a big way. It is hard to do. But they say what you mean. When you don't know what you mean, use big words. That often fools little people."

HUBERT WILKE, Director, Industrial and Educational Sales, TelePrompTer Corp., New York, N. Y.

Praises, praises to Herman Spivey. . . . Why do so many teachers and professors want to make simple things complex? Why can't they stick to simple fundamental principles that have practical value?

It takes an author to write a story in a book. It takes a scholar to write a book and say nothing.

LEWIS D. PATTERSON, Superintendent of Karval (Colo.) Public Schools

Speaks for Student?

Your editorial "Who Speaks for the Student?" [*One View*, September] is not only timely but rings the bell on one of our most important problems in the secondary school curriculum. If our high schools plan to continue being all things to all men; meeting the needs of all students; and, promoting the optimum development of each student, then we have failed miserably and have a long way to go. . . .

If faculties and administrators must speak for students, as you suggest in this excellent editorial, then they had better spend more time talking with, thinking with, and working with high school youth. They must become better acquainted with adolescent society, drives, and goals. . . .

STUART A. ANDERSON, Assistant Superintendent, Niles Township Community High Schools, Skokie, Ill.

Educational Executives'

OVERVIEW

A Buttenheim Publication

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Front and Center . . .

. . . position goes once again to the Business Official this month. Editor Shaw, who reached his own school superintendency (Scarsdale, N. Y.) via the business office route, has done a painstaking job of analyzing who a business official is and how he functions under several possible titles.

We shall proudly display this issue of Educational Executives' OVERVIEW at the Toronto convention of the Association of School Business Officials, October 7–11. Reprints of the cover article will also be widely distributed. And we look forward to seeing many of our friends who are regular ASBO members and exhibitors.

Our sales personnel will be passing the word to every exhibitor that OVERVIEW is now without doubt the strongest year-round link between buyers and sellers in education, a responsibility we do not take lightly as our schools and colleges move into a decade of unprecedented expansion.

Donald V. Buttenheim
Publisher

Rep. Delaney

I was most interested in reading the *Close-up* on Rep. James Delaney in your September 1961 issue. As you may well imagine, there is some opinion among the scientific people within our industry which is less than favorable in connection with the subject individual. . . . You make a statement that "In the resulting uproar, it was easy to get the Delaney Amendment modified to protect consumers without tying the hands of scientists." This is not the case. Both the Food Additives Amendment of 1958 and the Color Additive Amendments of 1960 contain similar wording regarding carcinogens. This wording has become popularly (but not officially) known as the "Delaney Cancer Clause." In both of these laws the clause is still unchanged. To my knowledge, there has been no serious move by any group to seek modification up to this time.

There is developing, however, a growing awareness among scientists of the fallacious thinking inherent in such a clause. If such an attitude continues to grow, I am sure it probably will be only a matter of time until an effort is made to change this particular feature of the law in some manner which will continue to protect consumers but leave to scientists, based on scientific fact, some discretion in making decisions on the safety of certain food and color additives. . . .

ALLAN E. SETTLE, Director of Public Relations, Manufacturing Chemists' Assn., Inc., Washington 9, D. C.

Yesterday's Schoolhouse

Re: "Yesterday's Schoolhouse," August OVERVIEW. Yesterday I saw a school building which looked identical to the "Little Octagonal School on Highway 45 in Pennsylvania." The building I saw was located on the highway in upstate New York between Westport and Fort Ticonderoga. I wonder if this could have been a stock plan of some Federal Government agency?

RICHARD F. TONIGAN, Plant Manager, Teachers College, Columbia University, New York, N. Y.

Circle OV-205 on reply card, last page

Step up to Bogen

For thirty years . . . leadership in sound. BOGEN-PRESTO, world's leading designer/producer of quality Sound Products, offers you the most exciting, most complete line in the industry. From ultra-modern office communications systems to high fidelity for the home—from P.A. and Mobile Sound systems to School Consoles—whenever precision, dependability and performance are required . . . step up to BOGEN.

Just a few of the hundreds of BOGEN Sound Products:

1 VP20 Portable Transcription Player — designed to fill almost every need in the commercial and educational areas.

2 TIX Executive Office Intercom — adds instant, expense-cutting communication for the office or plant of today.

3 MX60 Public Address Amplifier—sound flexibility to meet every need, every condition.

4 Bogen Twin-Com—Battery or AC powered. Perfect for home, small office, restaurant. 2 station master and remote intercom system.

5 Attend-A-Phone — service phone system between a central desk and all remote points. Applicable for office, bowling alleys, hospitals, schools, motels and many more.

6 TSD Bogen-Phones—10 and 20 station phones for inter-office communication. Require no central switchboard . . . multi and private conversations.

7 RP200 Fun-Couple Stereo Receiver — combining quality and style with built-in Multiplex . . . typical of the all-new line of BOGEN receivers, amplifiers and tuners.

Write for complete literature on the entire BOGEN Sound Line.

BOGEN-PRESTO

Desk OV-10 Paramus, N. J. • A DIVISION OF THE SIEGLER CORPORATION

61-8

Circle **OV-206** on reply card, last page

Another language laboratory advancement

FROM THE MOST EXPERIENCED NAME IN ELECTRONIC TEACHING!

WEBSTER ELECTRIC'S NEW Control Console

With the rapid introduction of a wide range of laboratory teaching equipment, it is well to remember that "experience is still the best teacher." The new Webster Control Console is the culmination of thousands of teacher-student hours' experience over a 13-year period! This, coupled with Webster's leadership in communications and electronics, is further assurance of proven ability in this teaching technique.

The Webster Console is a compact, all-in-one unit that adapts readily to existing rooms, or changing needs. Unitized design, with all components at close hand, facilitates easy operation, faster direction. Proficiency is quickly acquired.

Components are all Webster-made and include the *Program Source* — Ekotape® recorder-reproducers with exceptional fidelity and instant stop/start action, *Monitor Center* for direct contact between instructor and individual students, and the *Program Center* which permits the instructor to direct any of nine different programs (tape, radio, phonograph, audio portions of telecasts) to all of the students. The combination gives you a choice of a complete listen-respond-record system or a simple listen-respond setup. Program selection can be a student or an instructor option.

See your Webster Electric distributor* and this new control console before you make important decisions in laboratory equipment selection — or write direct for performance data.

STUDENT CONTROL — optional booths for listen-respond and listen-record-respond systems. Simple operation speeds learning; high fidelity sound aids comprehension. Booths are available with acoustical front panel or convertible desk top.

CONTROL CONSOLE — trim, furniture styling in grey-toned cabinet wood with contrasting Formica top. Drawers provide space for record changer and storage.

* *See Yellow Pages "Recording Equipment"*

ELECTRONICS DIVISION
WEBSTER ELECTRIC
RACINE · WIS

Educational Executives'

OVERVIEW

Vol. 2, No. 10 October, 1961

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Flexibility...Versatility

- **RECORD STEREOPHONICALLY** and enjoy stereo play-back of 2 track or 4 track stereo tapes.
- **PUSH BUTTON CONTROLS** afford simple operation. Safety interlock prevents accidental erasure of recorded material!
- **HIGH-FREQUENCY RESPONSE AND FIDELITY** allows detection of complete voice range differences. Highly beneficial to speech and speech therapy students!
- **INPUT AND OUTPUT JACKS** permit recorder to be used in sound treated rooms from a control booth. Use earphones without cutting off the external speaker!
- **SHUT-OFF SWITCH** automatically shuts-off power supply . . . permits teacher's concentration on students without keeping one eye on the recorder!
- **MONITOR SWITCH** allows use of recorder as an Ear-trainer using earphones as a P.A. system, or to utilize amplifier in the recorder with a second sound source, such as a phonograph!

V-M 'tape-o-matic'® Stereophonic Tape Recorder
WITH **"ADD+A+TRACK"®**—Model 722—**$259.95*** LIST

Also Available V-M Stereo-Play-Back Model 720 with **"ADD+A+TRACK"®—$225.00*** LIST

V-M

"ADD+A+TRACK"®... the Instructor's Most Valuable Teaching Tool!

Versatile V-M "Add-A-Track"® offers unlimited opportunities for powerfully effective teaching methods! A teacher records lessons. Then, or at *any* later time, the student records on another track while *listening* to the teacher's recording. On play-back, both recordings are heard simultaneously! Student track may be re-recorded any number of times without affecting the teacher's or master track.

Unite Sight and Sound for More Efficient Instruction!

V-M Slide-Projector Synchronizer
Model 1412—$49.95* LIST. A V-M Tape Recorder and Synchronizer in conjunction with a slide or strip film projector, increases the significance of any visual presentation. Offers more economical "do-it-yourself" training aids. With V-M's simplicity of operation, Synchronizer adds inaudible slide-change cues to tape recorded commentary. On play-back, these cues actuate remote-control projector, automatically advancing slides at times selected!

the Voice of Music®

V-M CORPORATION • BENTON HARBOR, MICHIGAN • KNOWN FOR THE FINEST IN RECORD CHANGERS, PHONOGRAPHS AND TAPE RECORDERS

Circle **OV-207** on reply card, last page

In Audio-Visual Education!

V-M

OFFERS A COMPLETE LINE OF QUALITY PRODUCTS FOR DYNAMIC TEACHING TECHNIQUES!

A new world of advanced teaching techniques await you with these functional A-V aids from V-M! Here are dependable quality products specially engineered to be utilitarian in all phases of education. No school is too large or too small to benefit from these professional V-M products of unprecedented value . . . unmatched versatility.

V-M OFFERS A COMPLETE "AUDIO LEARNING CENTER" PROPOSAL—from one unit to as many as your language laboratory requires. Send for detailed information for easy construction and operation of a Modern "Audio Learning Center."

•Institutional Prices Available Upon Request.

V-M Classroom Record Players Feature Superior Performance... Rugged Durability!

V-M Portable High-Fidelity Record Player and P.A. Sound System—Model 201—$99.95* LIST.

11" precision turntable! Dual Needle Cartridge is compatible for play of *any monaural or stereo* record monaurally! Full complement of controls! Complete input and output receptacles! A High-Fidelity Speaker System with *two* speakers especially tailored to the speaker enclosure to assure better bass response. "*Tolex*" Vinyl Case Covering resists scuff and stain! Washes clean, metal corners! Available in Marine Green or Metallic Gray.

V-M Portable Classroom Record Player—Model 208—$59.95* LIST.

Precision turntable! Dual Needle Cartridge is compatible for play of *any monaural or stereo* record monaurally! Separate Tone and Volume Controls! External Amplifier, Extension Speaker Jacks! Powerful Speaker tailored to speaker enclosure! Durable case built to withstand rugged use. Available in Metallic Gray.

Please send me additional information, without obligation, on V-M Tape Recorders and "Audio Learning Center" proposal.

V-M CORPORATION, Dept. OV-1061
305 Territorial Road • Benton Harbor, Michigan

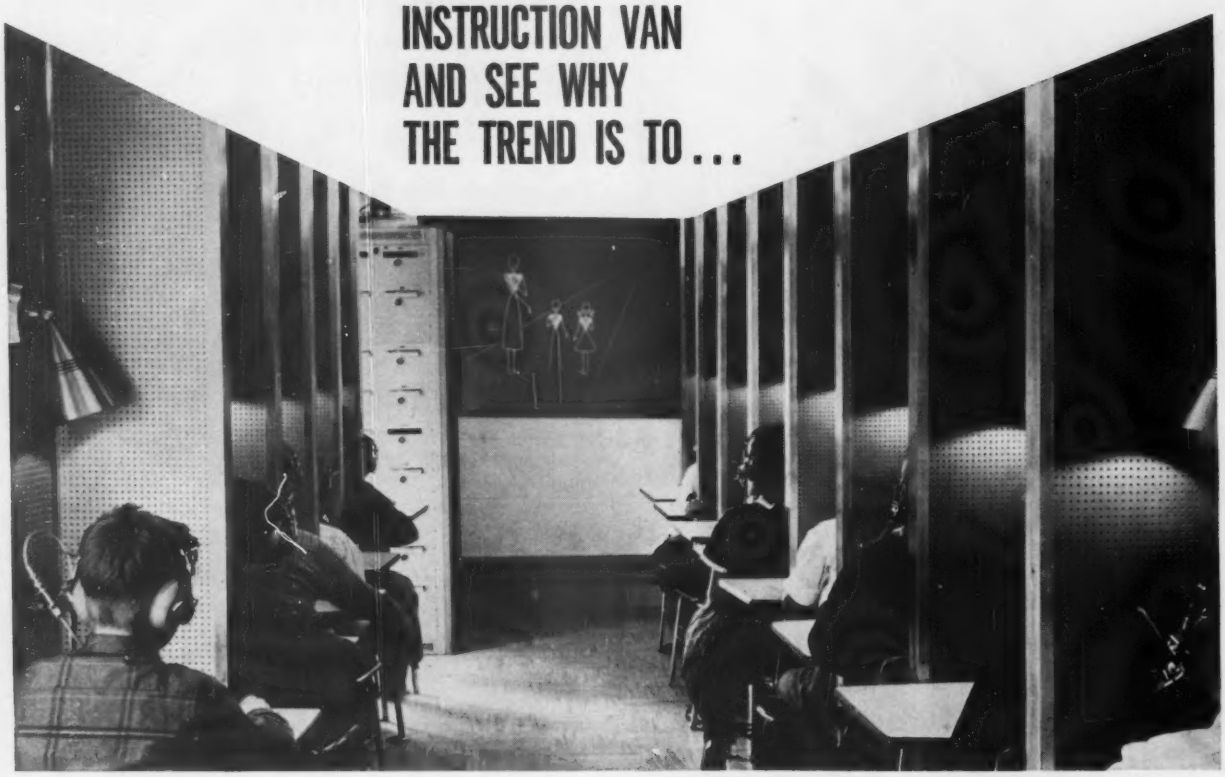
NAME_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

Circle **OV-208** on reply card, last page

WALK THROUGH A LINGUATRAINER® INSTRUCTION VAN AND SEE WHY THE TREND IS TO...



...AUTOMATIC REMOTE CONTROL

LinguaTRAINER Automatic Remote Control means:

- desk top teacher console of simple design eliminating necessity of tape recorders at teacher position.
- student position with only one switch to operate. No tapes to manipulate; lightweight headset-microphone combination frees hands for taking notes.
- important space savings because all operating equipment — automatic tape cartridges, tape recorders, amplifiers and power supply — is placed in an out of the way cabinet remotely controlled from teacher and student positions.

Another first in teaching languages from Science Electronics brings a mobile classroom for 18 students in a 36 foot van to the rural or urban school system for elementary schools or space-crowded high schools.

In electronic language laboratory systems, the trend is to automatic remote control equipment, and nowhere is this trend better seen than in the LinguaTRAINER Instruction Van.

Write for LinguaTRAINER System and LinguaTRAINER Van Brochures and article reprint "Technology To The Rescue" by Christine M. Gibson and Professor I. A. Richards of Harvard University

Lingua TRAINER®
REMOTE CONTROL
THE AUTOMATIC A SYSTEM

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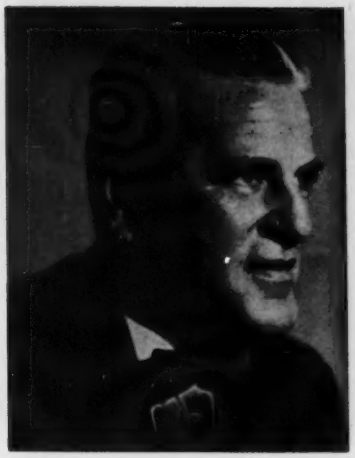

ONE VIEW

Archibald B. Shaw

In-Service Programs

THIS IS THE TIME of year when many of us get busy on something we call in-service training. Our aim is laudable. A staff which is not growing is dying. But to one view our programs seem to range pretty broadly.

At one extreme is the massive effort to train all teachers in, for example, the best techniques of teaching reading. At the other is the kind of un-structured program that equates opera-going with travel with study for a degree with curriculum committee work. One represents the by-gosh-we're-all-going-to-be-good approach, the other the-better-the-person-the-better-the-teacher school of thought. Both goals are desirable, of course. But the resulting programs are apt to fall short of maximum effectiveness.

Teachers just do not profit from the mass pressure approach. They have a wide range of competencies and interests which guarantees a most uneven response to the first tactic. The second fails because it doesn't come to grips with the question of purpose.

It's just this question—purpose—that needs thoughtful study before any program of in-service growth may reasonably be undertaken with budgetary support and official encouragement. We submit that the principal justification for an in-service growth program is an increase in competence and effectiveness in the performance of the job. For teachers, as one central group, the prerequisite to a planned program is a study of the teacher's job—the activities in which better performance will mean better education.

To one view, the job of the teacher is to:

1. *Teach individuals*—to do which he must know individuals (generically and specifically), know the subject, make the learning experience vivid, help the learner extract the essence of the experience, help him integrate the thing learned, and perceive new problems posed by the thing learned.

2. *Teach groups*—to do which he must know groups (generically and specifically), organize and manage groups, help groups pursue meaningful activities, and plan and evaluate group activities.

3. *Evaluate* individual progress and help learners evaluate their progress.

4. *Interpret* that progress to parents, colleagues, and others.

5. *Share responsibility* for non-classroom activities which are essential parts of school functions.

6. Work with others to *improve curriculum* and program.

7. *Help build common understanding* within the school, the system, and the community.

8. *Perform administration functions* necessary and appropriate to the individual and the institution (recruitment, planning, evaluating).

9. Carry fair share of *responsibility to the total profession* and appropriate sub-groups.

10. *Continue to grow* as a student and as a person.

Such brief statements are bound to be cryptic. This one needs elaboration. It is presented only to illustrate the kind of detailed performance definition that must precede a tailored in-service growth program.

It's presumptuous to set out one list for universal application. It's misleading even to work out duties which are common to all teachers in a given system. But for a system-wide program it seems helpful to identify the common jobs. The inventory will turn up a wide variety of means for growth. A few areas may permit system-wide devices like formal courses and occasional use of outside resources. Others may form the basis of faculty discussion meetings. Some yield to committee work, some to individual counseling. Visitations to other schools will turn up helpful practices. Whatever the means, it is proposed here that its use is to be justified largely by the promise it holds for improved performance.

Because training connotes trainer-trainee relationship and development of simple skills, we like the title "in-service growth." But regardless of title the prime justification for institutional support or administrative leadership in the program is its potential for improving the performance of people in their jobs; in their own particular contribution to the purpose of the institution. ●

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Military Service

Once more we face the prospect of losing people to the armed services—in prolongation of reserve duty, in the draft, and even in volunteer assignments. This time around the cause is less dramatic, though the need may be more urgent.

Laws protect the rights of those who go on to active duty. But no law can eliminate the hardship on the one leaving and those whom he leaves.

Many a corporation and educational institution has profited from a wise decision of a decade ago which led to the hiring of men certain to be drafted, as well as to the cheerful release on leave of more senior men to the armed services. There were some dislocations, of course, but the post-Korea years and the ensuing manpower shortage made those decisions look good indeed.

Patriotic duty may seem to clash with institutional interest at the moment of decision. But in the long run, those institutions will be strongest which have adopted the clearest and most generous policies as to the status of personnel—and prospective personnel—called to our nation's service.

Diplomas on the Wall

In a number of the professions, it is customary to display credentials where patients or clients may view them. If this practice were adopted by educators, might it help increase their prestige in the eyes of the public?

We polled a variety of leading educators—NEA department heads, deans of schools of education, state education commissioners, and heads of state superintendents' and teachers' associations—for an opinion. We asked them to answer "yes," "no," or "no effect" to this question: Do you believe that the practice of displaying diplomas, licenses, and certificates by members of the education profession (teachers, principals, superintendents, *et al*) would increase the layman's respect or enhance the prestige of the education profession?

Of the 82 percent who responded, 69 percent answered "yes," 14 percent "no," and 17 percent "no effect." The suggested practice found greatest favor among the heads of state education associations, of whom nearly seven out of eight replied "yes." Least responsive were the state commissioners of education, of whom only half so replied.

Many of the educators amplified their answers with reasons why they thought the practice of displaying credentials would, or would not, help to enhance prestige. An NEA department head commented: "I doubt that any respect, *per se*, is inherent in the diploma or certificate. To the extent a profession is respected for its learned status and integrity, a symbol of a person's background in that profession reminds the public of his stature. But so long as educators ignore their own standards by using English-trained teachers to teach mathematics and by keeping non-certificated substitutes in 'permanent' status year after year, we place our standards in disrepute. The discipline within the ranks of the medical profession reduces this kind of abuse to a minimum. When we establish real standards of competence, our diplomas will enjoy new status commensurate with our action."

A college dean commented: "I feel that educators achieve status by their leadership, contributions to the literature, teaching ability, and research. Diplomas do little!" Another dean replied: "It is not the diploma so much as the diploma from Harvard or Columbia or some big name college that impresses the educated layman." A state commissioner noted: "A more adequate salary and high standards of living would be more effective in obtaining the 'respect' of the modern materialistic American society."

The president of a state superintendents' association said: "If we expect to be classified as a profession, this is one of the things we should do. I display mine proudly." The president of a state teachers' association summed up the majority opinion: "People are accustomed to seeing certificates displayed in the offices of physicians and other professionals and accept these as evidence of their professional competency. A similar reaction could be developed for school personnel."—*Superintendents Wilfred Gallagher, West Greenwich, R. I.; David Russell, Ware, Mass.; and Edward Sullivan, Hopkinton, R. I.*

Moving Into a New Building?

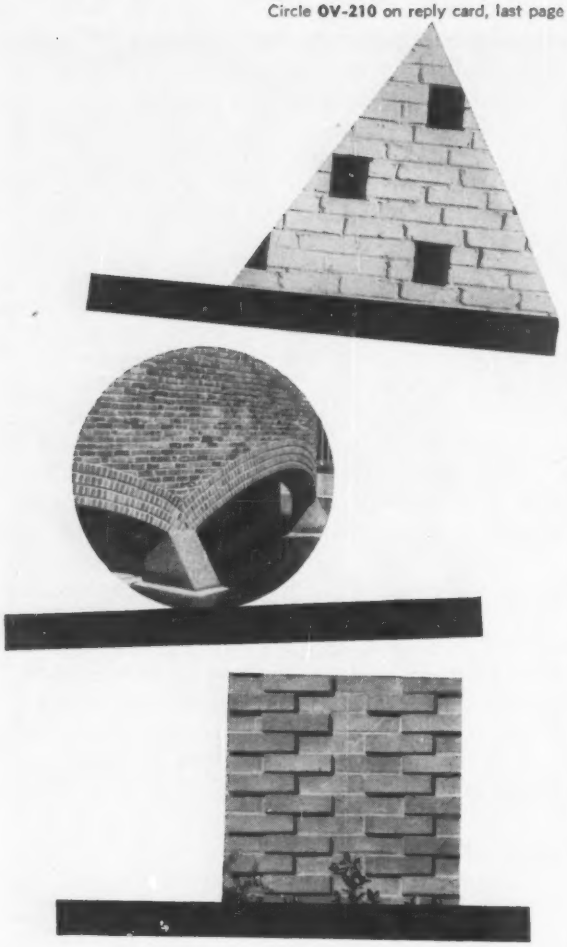
Yours is the rare case if your long-awaited building, or addition, is fully ready for use. Thank goodness there's something about the excitement of moving into new quarters that calls out the best of patience and adaptability in students and faculty alike.

This is the time that tests the sweet reasonableness of business managers who wrestle with contractors, architects, and suppliers to maintain a sense of urgency in the completion, at the same time as they must try to calm the impatience, soothe the dissatisfactions, and smooth out the rough spots in the path of those who are moving in.

Our admiration and sympathy to these valiant souls! Much as they deserve to be bothered no further, we hope they will remind themselves that faculty, students, and custodians need to be helped in learning how to use this new facility. For no matter how thoroughly the staff has been involved in planning, it's a rare institution where all those using the new building were in on it from the beginning.

One more job! But one where the planner, the architect, and the engineer can all help. We give behind-the-wheel training to youngsters, why not on-the-spot instruction for custodians—and, even more important, assistance in the most effective use of our new facilities to the teachers and learners for whom they are designed? •

Circle **OV-210** on reply card, last page



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ECONOMIC SCENE

Invitations to a Boom

THE ECONOMY is showing signs of loosening up, with more consumer spending and business buying on the horizon. Education, which has received much attention during the general lull, will probably have to fight for the same amount of attention in the coming months. One indicator is the mood of the public.

Personal income is at an all-time high. Preliminary figures place it at $421 billion as of September 1, which is an increase of $17 billion over the same period in 1960. Only thirteen states show a drop in personal incomes. Except for Michigan's dramatic drop (down 14.8 percent) most states slipped moderately, when they did. On the other hand, personal income in the remaining 37 states eased up steadily, with Hawaii, Alaska, and several mountain states leading the way. Average family income is at a peak of about $6,900. However, four million families earn less than $1,500 a year, still a matter of deep concern (Sept OVERVIEW p 79).

Balancing this has been a rise in personal savings, topping the $28 billion mark, also a peacetime record, and a concurrent drop in installment debt. This conservatism on the part of the general public, most observers believe, is about to change.

One major factor is the role of the Federal Government. About 20 percent of personal income is in the form of federal, state, and local government payments (wages, salaries, pensions, interest, etc.) with the Federal Government supplying much of that. Estimated federal expenditures during this fiscal year may climb eight or ten billions, with military buying supplying the major thrust (three to six billions of the total). With this major stimulant, business activity is already being stepped up to compete for both federal money and the predicted loosening of consumer spending. (Retail sales for Christmas should skyrocket this year in a dramatic break from the sluggish stance of retail activity since the beginning of the recession.) The Bureau of Labor Statistics has also reported that net spendable earnings—what is left after Social Security and income deductions—has been climbing to a record postwar high among factory employees. July spendable earnings for factory workers were running at an average of $83.54 a week (worker with three dependents), up about $2.30 over the figure for July, 1960.

Although personal expenditures are usually concluded to be mostly heat, light, insurance, medical care, etc., it is interesting to note that expenditures for private elementary and secondary education increased by 90 percent between 1955 and 1960, according to the Department

Representative Bond Issues

(Sold from Aug. 1 to Aug. 31, 1961)

School District or College		*Amt. in Millions*	*Moody Rating*	*Net % Interest*
Alas:	Anchorage Ind	$ 3.5	Baa	4.240176
Cal:	San Diego Unif	20.	A	3.4445
	Sacramento City Unif	10.	Aa	3.39
	Grossmont Un HS	1.59	Baa	3.7779
Kans:	Wichita #1	1.6	A	3.404
Mass:	Hamilton-Wenham Reg	2.085	*A	3.335
N.Y.:	Hempstead Un Free #2	2.2	Baa	3.73
	Greece Cent #1	3.	A	3.43
	Huntington & Babylon Cent #5	4.013	Baa	3.77
Ohio:	Lakewood	2.47	Aa	3.208
	Bedford City	1.8	A	3.63
Penn:	Churchill Area Sch Auth (Rev)	3.79	*Baa	3.965
Tex:	Conroe Ind	2.435	*A	3.2828
Utah:	Box Elder Co	1.25	Aa	2.7909

—*provisional

Compiled from The Daily Bond Buyer

of Commerce. Similarly, per capita expenditures for higher education (public and private) rose 80 percent. These two categories were first and third, respectively, in the Department's list of significant "growth" expenditures for that period. Hence, if the economy does surge upward and personal income continues to climb, it is reasonable to assume that education will benefit greatly. The only reservations are in the bond market.

The government and business are moving deeply into the money market. As a result, Federal Government bonds are yielding above a 4-percent return to investors. On one recent day sixteen federal bond issues were listed above 4 percent. Even some federal short-term notes were selling above a 3-percent yield and some federal bills due in less than six months were going over 2.8 percent. In the mortgage market, the picture also shows high-rate signs. Mortgages in many communities were carrying rates as high as 6 percent. Such competition for lenders bodes higher rates for education in the bond market.

After a quiet summer, the average interest rate on school bonds sold in August stood at 3.63 percent, a tiny but perceptible rise of .02 percent over July. Ranged against federal bond yields, plus the attractiveness of business investments right now, the school-money market may be in for a period of hard salesmanship to keep its rates down. Higher education, thus far, has been able to live with higher rates of debt repayment through the Housing and Home Finance Agency [See *From Washington,* p 38]

What is also a bit unsettling is the fact that this year is shaping up to be one of the biggest off-year bond election periods in history, which means a possible glut of the school bond market at a time when competition for money is keenest.—HAROLD F. CLARK

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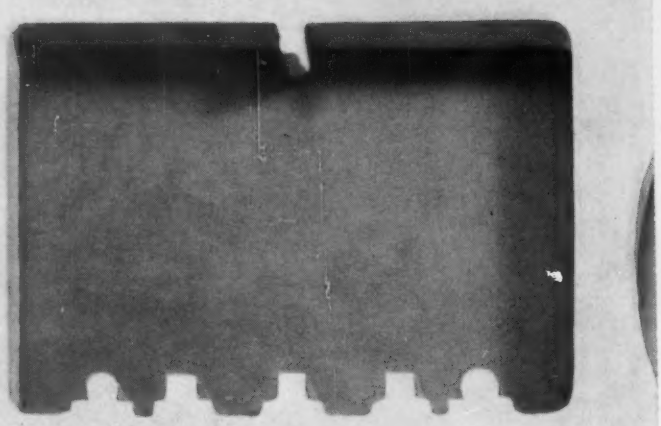

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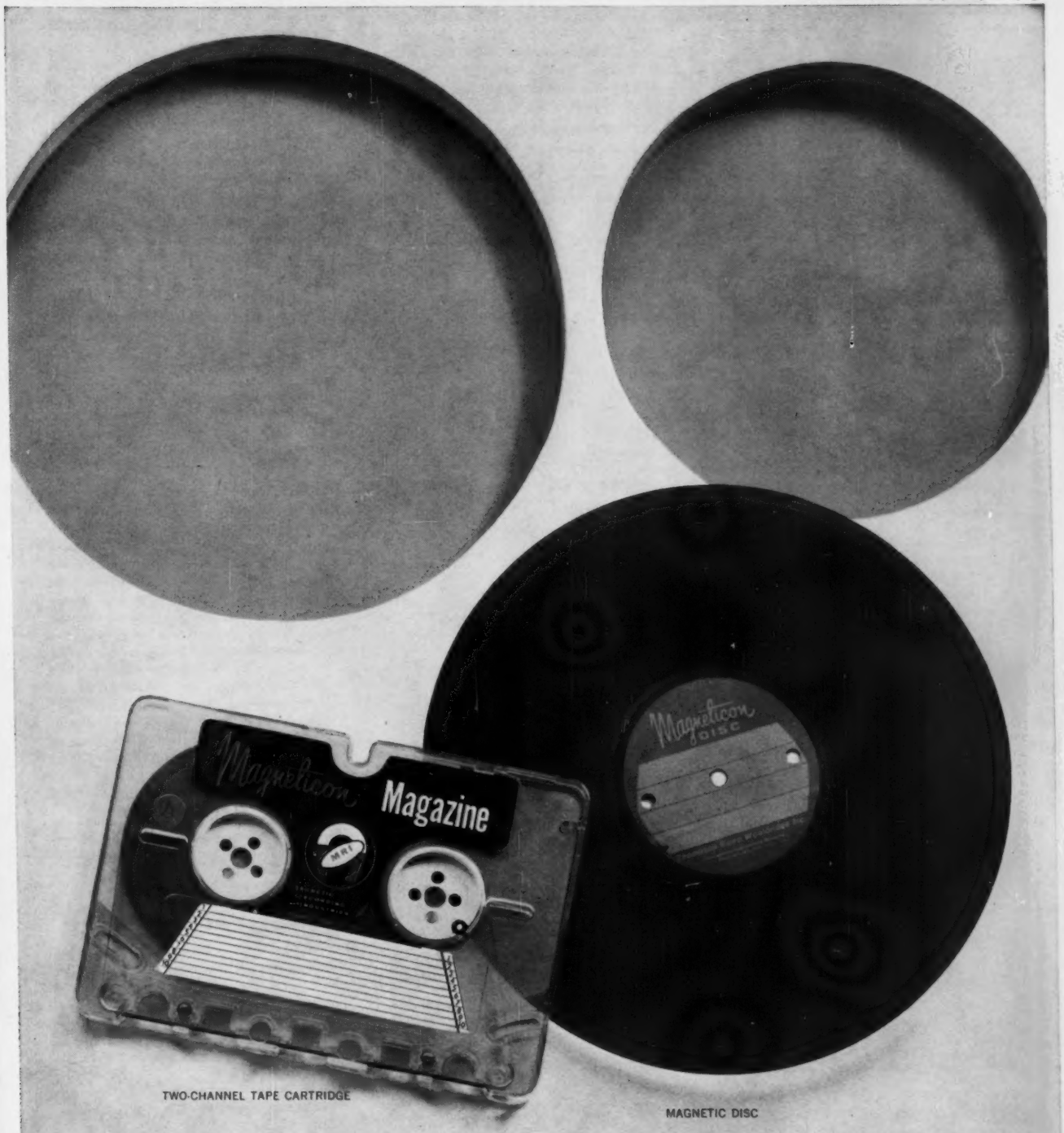

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CALENDAR

OCTOBER

2–6, National Council on Schoolhouse Construction. At Atlanta, Ga. Ex. sec.: Floyd G. Parker, College of Education, Michigan State University, East Lansing

5–6, American Council on Education. At Washington, D. C. Secretary: Edmund J. Gleazer, Jr., 1785 Massachusetts Ave., N.W., Washington 6, D. C.

7–12, Assn. of School Business Officials. At Toronto, Ontario, Canada. Ex. sec.: Charles W. Foster, 1010 Church St., Evanston, Ill.

20–21, Council on Cooperation in Teacher Education of the American Council on Education. At Washington, D. C. Sec.-treas.: Howard R. Boozer, 1785 Massachusetts Ave., N.W., Washington 6, D. C.

26–27, Educational Records Bureau. At New York City. Ex. sec.: Grace Turner, 21 Audubon Ave., New York 32, N. Y.

NOVEMBER

5–6, Assn. of Urban Universities. At Chicago, Ill. Sec.-treas.: Norman P. Auburn, The University of Akron, Akron 4, Ohio

5–9, Assn. of University Evening Colleges. At Cleveland, Ohio. Ex. sec.: Edwin H. Spengler, Brooklyn College, Brooklyn 10, N. Y.

5–8, Adult Education Assn. of the U.S.A. At Washington, D. C. Ex. sec.: Glenn S. Jensen, 743 No. Wabash Ave., Chicago 11, Ill.

5–12, National Assn. of Public School Adult Educators. At Washington, D. C. Ex. sec.: Robert A. Luke, 1201 16th St., N.W., Washington 6, D. C.

6–9, National Institutional Teacher Placement Assn. At Boulder, Colo. Ex. sec.: James H. Bash, School of Education, University of Virginia, Charlottesville

7–10, Council of Chief State School Officers. At Baltimore, Md. Ex. sec.: Edgar Fuller, 1201 16th St., N. W., Washington 6, D. C.

12–16, American Assn. of Land-Grant Colleges & State Universities. At Kansas City, Mo. Ex. sec.: Russell I. Thackrey, 1785 Massachusetts Ave., N.W., Washington, D. C.

Data for Delegates—attractions include the Kansas City Museum; Liberty Memorial; Midwest Research Institute; and William Rockhill Nelson Gallery of Art. Buyers and sellers can be seen every afternoon at Kansas City's Livestock Exchange and Stockyard. You can find up-to-date records and books completely covering the basic science and technology fields at the Linda Hall Library of Science and Technology. On Delaware St., in Independence, Mo., is the home of former President Harry S. Truman. Mr. Truman's presidential papers and gifts from foreign nations can be found in the Truman Library. November temperature—in the chilly 50's; not much chance of rain.

22–25, National Council for the Social Studies. At Chicago, Ill. Ex. sec.: Merrill F. Hartshorn, 1201 16th St., N.W., Washington 6, D. C.

DECEMBER

3–6, American Technical Education Assn., Inc. At Kansas City, Mo. Ex. sec.: William N. Fenninger, 22 Oakwood Place, Delmar, N. Y.

4–8, American Vocational Assn., Inc. At Kansas City, Mo. Ex. sec.: M. D. Mobley, 1010 Vermont Ave., N.W., Washington 5, D. C.

26–31, American Assn. for the Advancement of Science. At Denver, Colo. Assoc. admin. sec.: Raymond L. Taylor, 1515 Massachusetts Ave., N.W., Washington 5, D. C.

27–29, Modern Language Assn. of America. At Chicago. Ex. sec.: George Winchester Stone, Jr., 6 Washington Square North, New York 3, N. Y.

27–30, College Physical Education Assn. At Kansas City, Mo. Ex. sec.: M. M. MacKenzie, Box 70, Teachers College, Columbia University, New York 27, N. Y.

28–30, Assn. of American Law Schools. At Chicago. Ex. sec.: Samuel D. Thurman, Stanford Law School, Stanford, Calif.

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LATE NEWS

For further coverage, see pages 81–89.

THE MOURNING AFTER: Federal aid to education—the legislation President Kennedy called "the most important domestic issue"—is dead, at least so far as the Eighty-Seventh Congress is concerned.

The issue was decided on Sept. 12 when the Senate voted a two-year extension of the National Defense Education Act and aid to impacted areas. An identical bill was passed earlier in the month by the House of Representatives. When the Senate rejected, 45-to-40, efforts to limit the extension of these two acts to one year, all serious hope for a general federal aid bill vanished until after the 1962 congressional elections at the earliest.

Democrats, led by Sen. Wayne Morse of Oregon, sought a one-year limitation so that renewed extensions of the two programs next year could be tied into broader federal aid legislation to education.

In relinquishing that lever for action on a general aid bill, Congress has now accepted the probability that no serious effort will be made in 1962 for broad, new legislation.

Earlier in this session, the Senate passed a general bill which included aid for school construction and teachers' salaries. It died in the House Rules Committee.

A compromise bill for school construction aid, extension of the NDEA, and aid to impacted areas was also bottled up in the Rules Committee. The House voted 242 to 169 against calling it up for debate; instead, passed the two-year extension of the NDEA and impacted areas legislation; sent it all over to the Senate. The Senate's similar vote, comments the *New York Times*, "completes the sell-out to those who are determined to block real federal aid to public schools."

* * *

DIXIE DISSENT: Louisiana teachers have been told to quit the NEA because of its support of the U. S. Supreme Court's desegregation order. The order came from the state's attorney general and has the weight of law unless challenged in the courts.

William Carr, executive secretary of the NEA, told OVERVIEW that the matter was under study by NEA lawyers and no decision had yet been reached concerning court action. (Sept. OVERVIEW p. 24)

A 1956 Louisiana law bars teachers from being members of or contributing to any group advocating desegregation, on pain of dismissal.

* * *

BIG BITE: The states' tax revenue in the 1961 fiscal year rose to $19 billion, the U. S. Census Bureau reports. This was an increase of 5.4 percent over the states' total tax collections for their fiscal years ended in 1960. In contrast, collections in fiscal 1960 were up 13.8 percent from the year before. Federal officials say the smaller gain last year was due largely to last winter's business recession. State tax collections in the current year are likely to accelerate, say officials, because of the quickening economic pace and the recent enactment by a number of states of new or higher taxes.

* * *

CONGRESSIONAL RECORD: As OVERVIEW went to press, the first session of the Eighty-Seventh Congress was about to end. Here are last-minute highlights on legislation affecting education.

Peace Corps: Both the House and Senate had voted favorably to give permanent status to the Peace Corps. Differences in the two bills were about to be resolved by a conference committee; final passage was assured. The legislation authorizes $40 million for the first year. It also requires a volunteer to take an oath of loyalty. R. Sargent Shriber, Jr., Peace Corps director, said there was still a great need for such specialists as surveyors and agricultural teachers.

Youth Conservation Corps: Committees of both houses approved bills setting up a YCC under the Labor Department, but no final action was expected in this session.

Manpower Development and Training Act: This bill which calls for $655 million for four years to train unemployed workers in new skills, passed the Senate but was bottled up in the House Rules Committee. Action was doubtful.

Department of Urban Affairs: The bill to establish this new cabinet-level department was postponed until next year.

Migratory Labor: A bill banning farm labor by children under 14 (except on parents' farms or those of neighbors within twenty-five miles) was passed by the Senate. The House might act before the session ended.

G. I. Bill for post-Korean War Veterans: Neither house was likely to vote on this bill this year.

Educational Television: The Senate passed a bill providing up to $1 million to each state. The House has yet to vote out its own version.

National Science Foundation Scholarships: The House passed a bill to make it a crime for a member of any subversive group to apply for a NSF scholarship. Senate action was unlikely at this session.

* * *

PROSPERITY: The university presses are flourishing, according to *Publishers' Weekly*. Harvard, for example, shows a growth of more than 22 percent in sales for the first half of this year as against January–June last year; Johns Hopkins, 11 percent; Indiana, 56 percent; Princeton, 22 percent; Texas and Minnesota,

each 44 percent; Michigan, 21 percent. Topping the list, however, is Wesleyan University Press, whose sales are 29 percent better this year than last.

* * *

UNION: The American Federation of Teachers (AFL-CIO) is banking heavily on the outcome of its New York City local's campaign to be named collective bargaining agent for all teachers in the nation's largest city. At the AFT convention in Philadelphia, President Carl J. Megel revealed that the AFT has loaned New York's United Federation of Teachers more than $20,000 to cover organizing expenses. (Teachers in New York recently voted 27,367 to 9,003 in favor of collective bargaining. Another election will be held to determine the bargaining agent. The UFT is highly favored to win this election).

Megel also warned that victory in New York may create new problems: "City superintendents, fully aware of our collective bargaining campaign in New York City, will most certainly offer stiffer resistance to union proposals even though union representatives may be held in higher respect."

Megel announced that AFT membership exceeds 61,000 and that 26 new locals, including five college and university locals, were formed during 1960–61.

* * *

NORTHERN EXPOSURE: Peaceful and token integration was the pattern last month as schools opened in the South. Dallas became the last large city in Texas to integrate; Florida, Louisiana, and Virginia opened additional schools to Negroes; in New Orleans, scene of violence and white boycotts last year, integration showed slow but orderly gains. In all, a total of eighteen southern school districts moved toward integration for the first time.

But a new integration pattern was shaping up in the North. In Chicago, with the encouragement of the NAACP, more than 100 Negro youngsters, accompanied by at least 70 parents and other adults, tried unsuccessfully to enroll in nine all-white public schools. The Rev. S. S. Morris, president of the Chicago branch of the NAACP, has filed a suit by thirty-two Negro parents asking "redistricting to achieve the maximum amount of integrated schools."

Apparently, the NAACP plans to base its suit on the same principles used in New Rochelle, N. Y., where a federal district court ordered the local board of education to permit transfers from nearly all-Negro Lincoln School. Last month, almost two thirds of Lincoln School's Negro students were absorbed quietly into eleven other elementary schools.

In New Rochelle, the board contended its policy of neighborhood schools did not violate the 1954 Supreme Court desegregation decision. The Federal district court disagreed and was upheld by the Federal Circuit Court of Appeals. The New Rochelle board is appealing the decision to the U. S. Supreme Court.

The Rev. Carl Fuqua, executive secretary of the Chicago NAACP, told OVERVIEW that a similar situation existed in Chicago as in New Rochelle, but on a much larger scale. He said that of the forty-one elementary schools on double shifts in Chicago, thirty-nine had all-Negro enrollments and the other two were nearly all Negro. Many elementary schools with all-white enrollment, he said, have room to absorb Negroes.

Chicago Schools Superintendent Benjamin C. Willis said, "our schools are community schools." Transfers to schools outside a child's district had been eliminated six years ago and not more than fifteen or twenty such transfers a year had been permitted since then, he explained. Willis also told the school board that a study of all school buildings is underway.

While Chicago seems headed for the courts, two major court decisions were reached elsewhere:

Public funds to finance segregated private schools in *Prince Edward County, Va.* were declared invalid by Federal Judge Oren R. Lewis of Alexandria. He ruled the payment of state grants to Prince Edward residents were illegal because, while they were intended to offer freedom of choice between public and private schools, Prince Edward students were actually denied the choice. The grants were made, he noted, when no public schools existed.

Judge Lewis also declared tax credits for contributions to private schools in the county illegal; deferred a decision on whether public schools could be illegally closed to avoid integration until the Virginia Supreme Court rules on the issue; directed county officials to prepare a desegregation plan for elementary schools. (such a plan had been previously ordered by the court but had never been submitted).

In Louisiana, a three-judge federal court struck down the state's school-closing law, which permitted school districts to vote in favor of abandonment of public schools faced with desegregation orders.

"This is not the moment in history for a state to experiment with ignorance," said the court.

* * *

NOT TAX DEDUCTIBLE: A parent's donation to a private school was ruled only partly deductible by the U. S. Tax Court. The parent contributed $1,075 to a tax-exempt school the same year it was attended by two of his children. The school charged no set tuition, relying rather on donations. The taxpayers claimed the entire amount as a charitable deduction, but the Internal Revenue Service disallowed $400 as the school's actual outlay for the children's instruction. (U. S. Office figures average per-pupils cost in private schools at $440.00.)

The Tax Court, backing the Service, said the disallowed amount was actually in the nature of tuition fees and not a true charitable contribution.

* * *

TREND?: The number of graduate students pursuing the doctorate in education dropped off "suddenly and alarmingly" from 1959 to 1960, reports Dr. Maynard Bemis, executive secretary of Phi Delta Kappa, professional education fraternity. Two years ago there were

1,976 dissertations underway at 91 U. S. and Canadian institutions who cooperate with Phi Delta Kappa in preparing its annual list of doctoral dissertations. One year ago this number dropped 23 percent to 1,516 although 14 more institutions cooperated in preparing the list.

"If this is the beginning of a trend and if the trend continues," Bemis warns, "college and university administrators will be increasingly hard put to staff their teacher-preparatory schools and departments. Many are already having to employ master's degree people in positions for which they would formerly consider only persons with the doctorate."

Bemis suspects that graduate students are forsaking Ed.D. studies in order to take advantage of generous grants and fellowships in other fields. According to a USOE study, the 139 doctorate-granting institutions awarded graduate fellowships with a total value of over $35 million in 1959–60. Over 40 percent were in mathematics, engineering, and the physical sciences; slightly less than 19 percent each were in the biological and social sciences; about 16 percent, in the humanities; and only 5 percent, in education.

Another USOE report on the 1,500 fellowships awarded under Title IV of the NDEA, reveals that 39 percent are in scientific and technical subjects, 26 percent in the social sciences, and 8 percent in education.

According to Bemis, these allotments of fellowships are grossly unfair to graduate students in education, who constitute 30 percent of all graduate students in U. S. institutions—95,000 out of a total of 314,000.

* * *

LAND-OFFICE BUSINESS: Mississippians will vote this month on a constitutional amendment permitting townships to sell to industry land that was set aside for local schools.

The issue developed when Standard Oil Co. (Kentucky) decided to build a new $125 million oil refinery near Pascagoula. Part of the plot selected by the company was one of the tracts reserved for the schools. The state constitution says such tracts can be leased but not sold. After negotiations, the state agreed to sponsor a constitutional amendment making it possible to sell such land for industrial development.

At $750 an acre, the 565-acre tract will cost the company $423,750. That will enable Jackson county to buy other land for township schools and have about $200,000 left over.

* * *

SCHOOLS IN DISASTER: Reports from Texas and Louisiana on Hurricane Clara indicate the schools were used extensively as shelter areas and that school personnel pitched in to help homeless victims. (See page 54).

* * *

UNIFICATION: A pioneering ten-year project to combine the resources of all social sciences will be tested at Princeton University, President Robert Goheen said the project, thought to be the first of its kind, will bring together faculty members in history, politics, economics, sociology, anthropology, and social psychology. All will be concerned with the study of human resources, human relations, and human organization.

Goheen said, "The new venture will face difficulties. Universities and their faculties have become increasingly caught up in specialization. But if they are to play their proper role in solving world-wide tensions, they must help organize and integrate specialized knowledge into generalized principles which are relevant and useful in public and international policy."

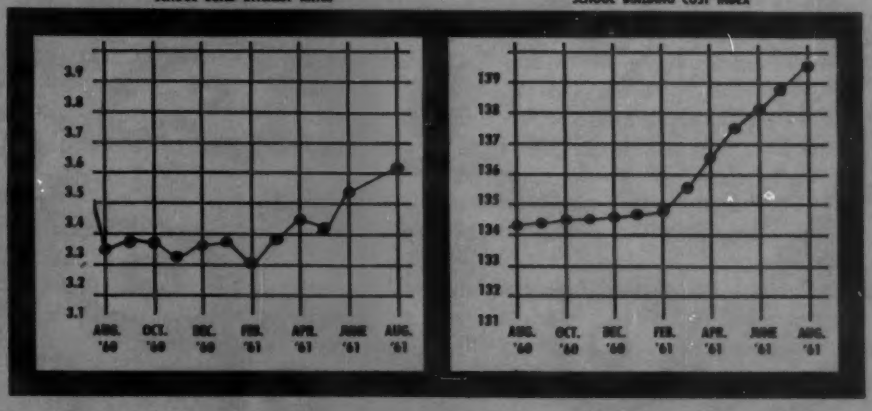
The project is sponsored by the Roger Williams Straus Memorial Foundation, which has made a $400,000 grant to be followed by a $1 million grant if the project is successful.

* * *

BUILDING BOOM: Hotels won't be the only new buildings going up in Florida in the next few years. Gov. Farris Bryant will spend $30 million to expand the state university. The program is designed to enable Florida to meet the demands of rapidly expanding population and the influx of space research and industry personnel. In addition to the construction, the program calls for extensive off-campus graduate study.

The state university system now consists of a school at Gainesville, two at Tallahassee, and a new university in its third year at Tampa. Another new institution

BUILDINGS & BONDS: School bond interest rates rose in August to 3.63 percent and a continued rise is expected. Building cost index climbed to 139.6 (1947–49 = 100).



will open in Palm Beach County in 1964, and a sixth, at Pensacola, is in the planning stage.

About $7 million of the money will come from private sources, mainly foundations and industry. The rest will come from the state, the bulk of it from the sale of $15 million in revenue certificates.

* * *

ON THE AIR: *American Newstand,* a news program "specifically directed at the young," will make its television debut this month over the ABC network weekdays from 4:50 to 5 P.M. EST. The series is the second of its type to begin this season. NBC started *Update,* a news program for high school and junior high school students, last month. (Aug. OVERVIEW p. 59)

The Westinghouse Broadcasting Co. is sponsoring three series of educational programs. One, entitled *I Have A Story,* is a series of 12 one-minute announcements which encourage young people (6 to 12) to borrow books from the library. The second, produced in cooperation with Stanford University, is called *College Presidents Speak.* Each of the 42 two-minute programs features a college president giving his personal views on problems of higher education. The third is a series of 50 half-hour lectures by Prof. Bergen Evans, Northwestern University, entitled *English for Americans.*

Meanwhile, the Midwest Program on Airborn Television Instruction, began broadcasting on Sept. 11. The taped programs will be televised six hours a day, four days a week, from an airplane circling at 23,000 feet over central Indiana. The UHF broadcasts will be viewed by nearly one million students in thirty elementary and high schools.

* * *

NEW MAGAZINE: The first issue of *Overseas,* a new monthly (Sept.–May) magazine devoted to the field of international education, has appeared, published by the Institute of International Education. The first issue contained articles by President Kennedy, Secretary of State Dean Rusk, former Ambassador to the United Nations Henry Cabot Lodge, and novelist André Maurois. The magazine will appear each month from September through May.

* * *

NEW DICTIONARY: The first new Merriam-Webster unabridged dictionary in twenty-seven years was published this month. *Webster's Third New International Dictionary* has 2,720 pages, sells for $47.50 with buckram binding, and takes official note of 100,000 new words and meanings ("A-bomb," "astronaut, "beatnik") added to the language since the *Second New International* appeared in 1934. More than 100,000 words have also been dropped from the edition, leaving 450,000 entries, slightly fewer than before.

Definitions are written in single phrases, replacing the thumbnail essay style of many former definitions. Instead of offering predominantly classical quotations to show the use of words, the work is sprinkled with 200,000 quotations chosen from contemporary sources. Example: "Soon my conclusions will be *finalized*"—D. D. Eisenhower.

* * *

A MATTER OF DEGREE: A new program that will enable medical students to earn both an M.D. and Ph.D. degree will be started next year by Tufts medical school. By taking summer courses prior to entering medical school and by fulfilling special assignments, students can complete about six months of uninterrupted research training in their first year and approximately four months during the second. In the third year, students will enter the regular clinical program and may continue their research during elective time in the fourth year. The program was promoted by a scarcity of medical teaching and research personnel.

* * *

POTPOURRI: More than 22,000 vending machines dispensing school supplies—notebooks, pens, typing paper—have been placed in schools in thirty-three states. . . . College students prefer to study in small spaces rather than large library reading rooms, according to a survey conducted at Mount Holyoke, Amherst, Smith, and the University of Massachusetts. . . . Children raised in the U. S. appear to be more honest and frank than those raised in authoritarian societies, says the International Congress on Mental Health. . . . The Carnegie Institute of Technology has instituted a new program of visiting committees for all departments and divisions. A minimum of nine members including at least one trustee, three alumni, four non-alumni, and one other member from any of these groups will serve on each committee. . . Bonds for construction of elementary and secondary schools issued in June amounted to $190 million, reports the Investment Bankers Association. . . . Nearly half of New York City's one million public school children seem to require some kind of extra help from their schools, the final report of the Mayor's Juvenile Delinquency Evaluation Project estimates. . . . Only 58.9 percent of the 5,950 students enrolled in District of Columbia ninth grade classes in 1957–58 entered twelfth grade last year. . . . The Health Information Foundation reports that the average child at age 6 has about six primary teeth that are either decayed, filled, or in need of extraction. By age 15, the average child has about ten decayed permanent teeth. . . . A survey of rural teachers in Wisconsin reveals that only 2 percent favored the old-fashioned elementary school with one teacher for all grades. . . . Given equal opportunity, education, and background there is essentially no difference between the IQ scores of whites and Negroes, according to the American Psychological Association. . . . A federal grant of $81,000 for a study of disabled workers has been made to the Human Resources Foundation. The project will use the techniques of space medicine to study reactions of disabled workers in an on-the-job setting.

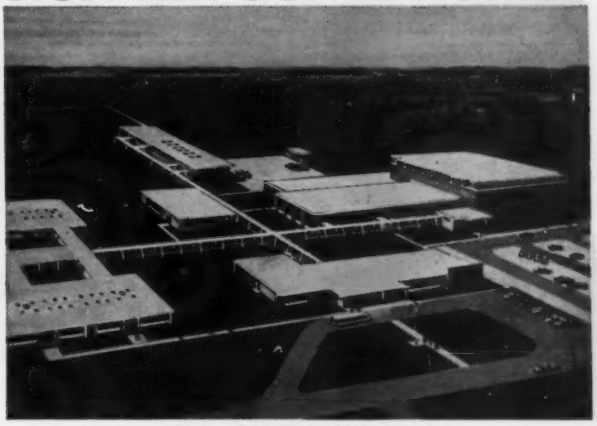
Circle **OV-214** on reply card, last page

WHICH SCHOOL COST LESS TO BUILD?

AIR CONDITIONED

Oak Grove Junior High School
Clearwater, Florida

NON-AIR CONDITIONED



Pinellas Park Junior High School
St. Petersburg, Florida

An exclusive Herman Nelson report on the economies of school air conditioning

These schools were constructed under the supervision of one school board. Each is a part of the Pinellas County, Florida public school system. Each was designed by a different architect. The schools are identical in terms of educational space and facilities. For accurate cost comparisons, it should be noted that the non-air conditioned school conforms to Florida state design requirements for natural light and ventilation in schools. The air conditioned school was permitted special design liberties by the state which, because of air conditioning, become both possible and advisable.

Herman Nelson presents a complete cost study of this unique project on the following pages

AIR CONDITIONED SCHOOL COSTS $15,918 LESS!

Now underway: The first realistic comparison of year-round air conditioning versus conventional heating systems for schools

Leading architects and school planners have contended for some time that the air conditioned school can be *constructed* and *operated* more economically than school plants with conventional heating systems. This pioneer project in Pinellas County, Florida has already confirmed the precedent that:

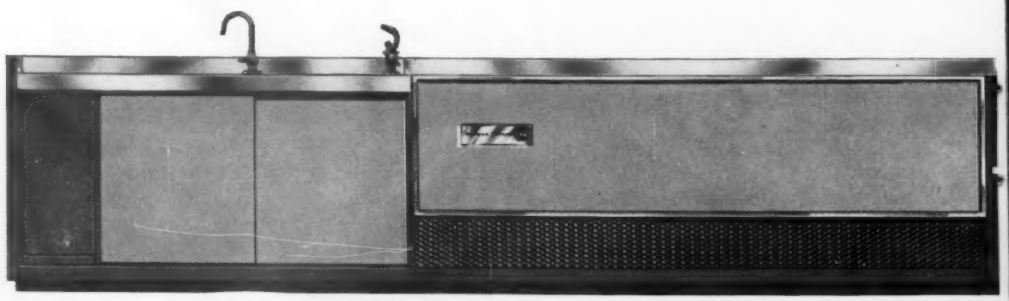
> An air conditioned school can be built for less—*$15,918 less in this case*—even in areas where costs for heating and ventilating are relatively low and those for air conditioning high!

Many other factors are also being studied. A three year research program, underwritten by the U. S. Office of Education, will evaluate the advantages of air conditioning in terms of (1) operating expenses, (2) student attendance, (3) increased use of school facilities and (4) "learning environment."

Plot orientation is no problem for the air conditioned school since air conditioning eliminates the need for natural breeze ventilation. As a result, Pinellas County's Oak Grove school is more compact—requires less space than its non-air conditioned companion. These and many, many other construction details sharply reduced construction costs of the Oak Grove school.

Another key cost influence is the *type* of air conditioning system selected. Low-cost year-round thermal control is being achieved at Oak Grove school with efficient Herman Nelson HerNel-Cool unit ventilators. The HerNel-Cool system acts as a thermal "handy-man" in school rooms . . . fulfilling the special needs for sensitive heating, ventilating and natural cooling (with outdoor air) plus mechanical cooling in hot weather.

Write today for your free Herman Nelson Fact Kit on school air conditioning. A comprehensive report on the Pinellas County project will be enclosed.



Product Engineering magazine's "Master Design Award" awarded to Herman Nelson for new unit ventilator styling.

AIR CONDITIONED SCHOOL:

Oak Grove Junior High School

Clearwater, Florida

CONSTRUCTION FACTS

Will contain same basic facilities as those in Pinellas Park school. Features a very compact scheme made possible by air conditioning. Classrooms are rectangular . . . narrower dimension reduces corridor length. Mall connects various parts of the school and has plastic skylight. Window sills are high since there is no need for ventilation cooling. Concrete block with brick facing. Roof is gypsum decking supported by steel joists. Herman Nelson unit ventilators will heat, ventilate and air condition classrooms. Unit ventilators are located on the inside walls which are separated by mechanical core space containing piping, wiring and admitting ventilation air.

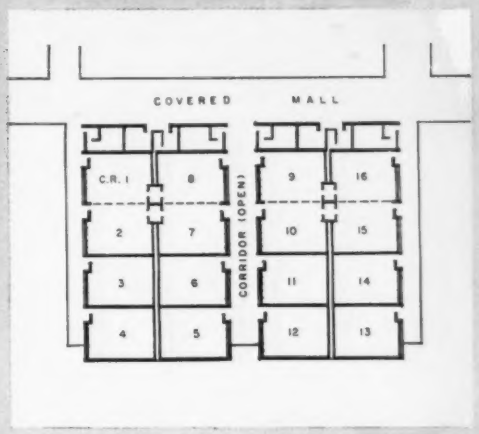
CONSTRUCTION COSTS

(Costs include a total of 24 classrooms, an additional eight classrooms will be added later.)

Mechanical (electrical, plumbing, heating, ventilating and air conditioning)	$235,640
All other construction	$439,232
Total cost	$674,872

Architect: Bruce and Parrish, A.I.A., St. Petersburg, Florida

Consulting Mechanical Engineer: Healy & Latimer, St. Petersburg, Florida



NON-AIR CONDITIONED SCHOOL:

Pinellas Park Junior High School

St. Petersburg, Florida

CONSTRUCTION FACTS

Pinellas Park school approaches campus-style design. A cluster plan for maximum breeze ventilation. Classrooms are nearly square with windows on two sides where possible. Buildings occupy one-half of 20-acre site. 32 classrooms, gymnasium, auditorium, cafeteria, shops, home economics rooms, library and administrative offices. One story buildings of concrete block with brick facing. Roof is pre-cast concrete. Classrooms have plastic-dome skylights. Heating is residential-type gas-fired furnaces, one unit serving two adjoining rooms. Exhaust fans serve rooms without windows on two sides, according to Florida State school building regulations.

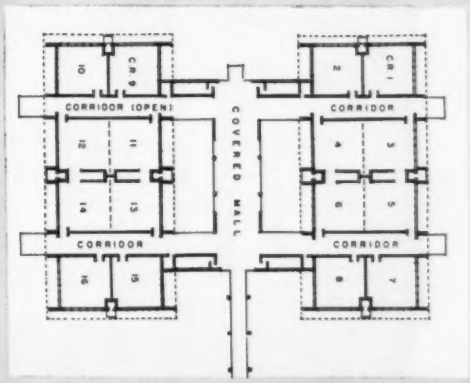
CONSTRUCTION COSTS

(Costs include a total of 24 classrooms. Eight more will be added in future construction.)

Mechanical (electrical, plumbing, heating and ventilating)	$180,498
All other construction	$510,292
Total cost	$690,790

Architect: Charles L. Colwell, A.I.A., St. Petersburg, Florida

Consulting Mechanical Engineers: Healy & Latimer, St. Petersburg, Florida



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SEARCHING THROUGH RESEARCH

Machine Data Processing

BEFORE 1950, data processing with punch cards was rarely found in educational institutions. Since then, expanding enrollments and district consolidations have impelled more than 400 school systems to switch to machine processing for quicker and more accurate data on pupil personnel. [For a case study of one school's conversion, see page 64.] Each system that has made the switch has had to decide first whether to (1) use a service bureau, (2) rent the data processing equipment, or (3) purchase it.

A University of Tennessee study on automated data processing practices in public schools found that rental was by far the most common practice. Data collected from 146 systems in thirty-three states which use punch card procedures showed that 71.2 percent of the systems rent machines; 9.6 percent own them; and 8.9 percent use a service bureau. Of those that own or rent, 4.1 percent find it necessary to use a service bureau. Of the systems reporting, 27.4 percent were in California. Mean population of all systems who purchased machines was over 200,000 while the mean population of California systems who purchased was under 100,000.

There is no single best way for an educational system to acquire data-processing equipment. It depends on the size of the system, available equipment, available funds, work load requirements, etc. Each of the three

By J. Floyd Cunningham, assistant professor of business and education at the University of Tennessee, and Robert Smawley, director of research at Eastern Washington College of Education, Cheney.

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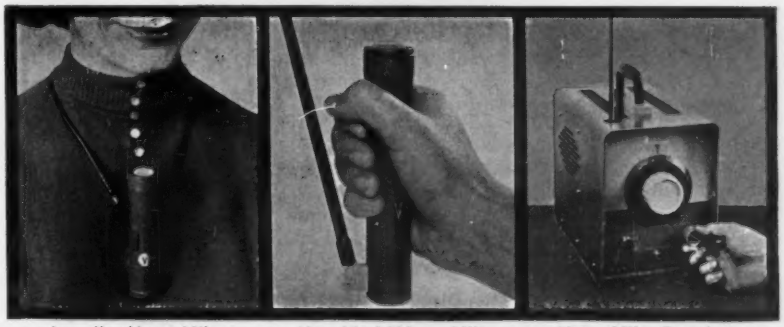

Lavalier Vega-Mike | Hand-held Vega-Mike | Vega-Mike Receiver

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Research (continued)

methods has its advantages and disadvantages:

Service bureau. Use of a service bureau eliminates the rental or purchase costs of equipment and employment of specially-trained personnel and thereby may lower the immediate cash outlay. However, a private concern would be compelled to charge a margin of profit which would eat into the initial savings. Some of the daily operations of the school would be hampered while the records are being processed at the service bureau. The confidential nature of the material is another consideration; some school records should not get into the hands of nonprofessional personnel outside the employ of the school. Some administrators have used service bureaus to see if a changeover to punch-card processing is practical for their systems. If a service bureau is chosen, it must be close enough to the source of data so that messenger service presents no problem.

Rental. Equipment can be either rented outright or rented with option to buy later with credit given for previous payments. There are several advantages in renting the equipment: costs are fixed and known in the contract; the manufacturer supplies maintenance service; loss in obsolete equipment is minimized; and contracts may be short-termed and cancellable. Monthly rentals are roughly 2.5 percent of the purchase price.

Purchase. Generally speaking, the advantages of purchasing punch-card equipment are the disadvantages of renting. For example: as a machine's work load increases, so does its efficiency (two- or three-shift operations don't add to the machine's cost); the basic rental unit is a forty-hour week of machine time, so "downtime" for repairs during the forty hours results in a direct charge for unavailable equipment—a penalty which machine ownership avoids; and newly-developed equipment can usually be purchased more readily than rented.

ONCE the administrator has converted his educational data to punch-card operations there are new

problems lying in wait. A poll of 117 school administrators who use machine data processing revealed chronic or recurring administrative problems that could be grouped rather easily into ten areas. Each dealt directly with the administrative process or practical and technical knowledge; there was either insufficient technical know-how to give proper direction to the equipment's function or under-estimation of the human element in the switch to machine processing.

Following are the ten problem areas and some suggestions for avoiding them that were made by successful and "battle-hardened" data-processors in the school systems polled:

Planning. Spend at least six months investigating punch-card operations. Involve the board, the public, and the staff in planning committees.

Orientation of personnel. Teachers are the key people to enlist and will, in turn, be the medium through which parents and pupils will accept the new routine.

Operative personnel. Hire a highly-trained machine-room supervisor who can train operators.

Student records. First establish a student master deck, then registration and scheduling, then attendance reporting, and then grade reports.

Organization. Document flow-charts and procedures in writing. Establish a central control for multilateral services.

Governmental report regulations. Check with state authorities before plunging ahead.

Technical information and assistance. Enlist aid from other schools which have made the transition successfully.

Coding. Check the U. S. Office of Education's "Suggested Codes for Machine Processing" (1960).

Forms and supplies. Allow several weeks for delivery. Design cards and forms as you develop each application. Consider color-coding—it's a big help in identification.

Selecting equipment. Consider both immediate and long-range needs. Purchase cost is usually retired by rental in five years. Examine carefully the claims by service bureaus. ●

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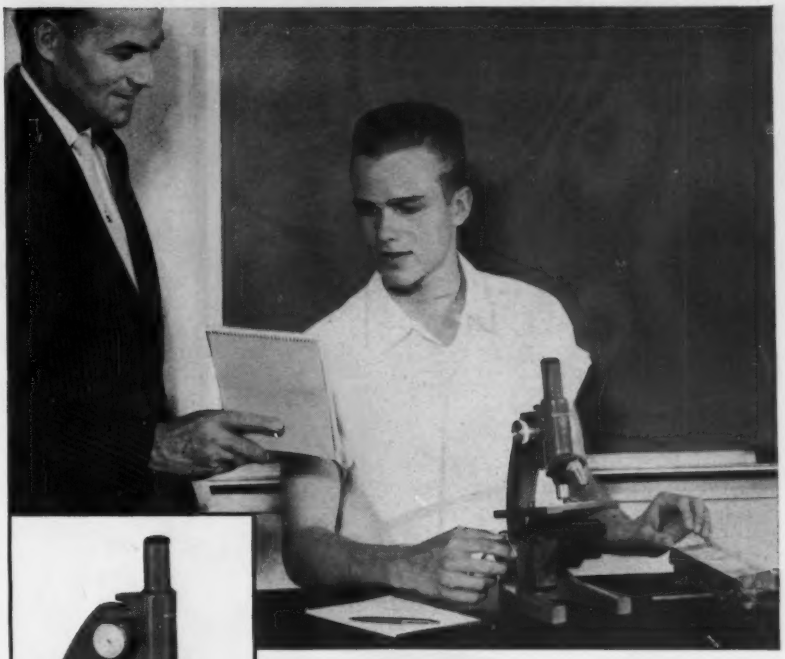

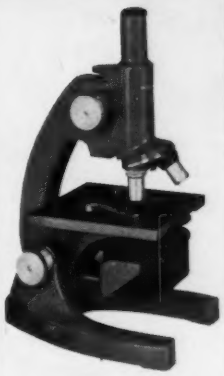

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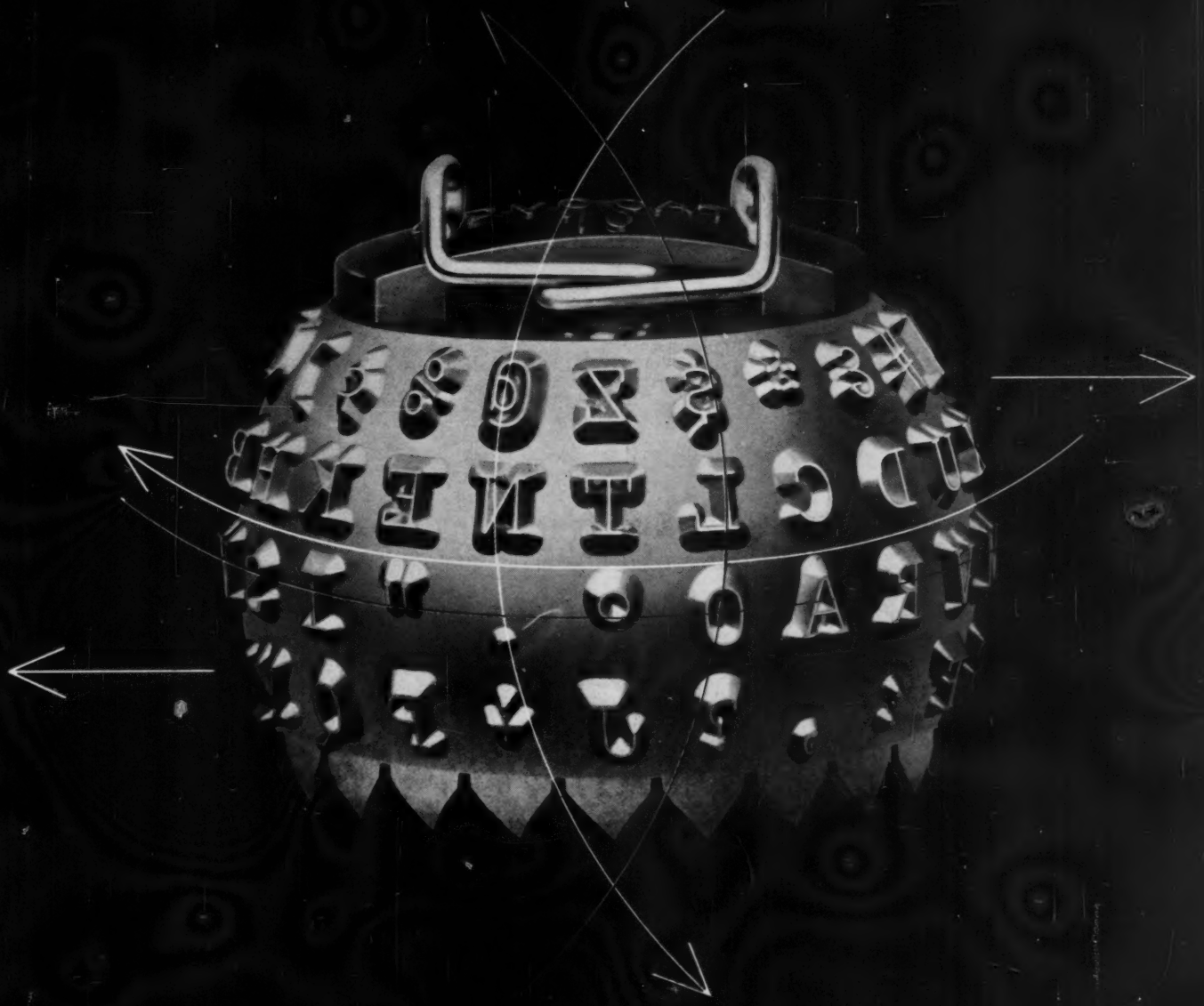

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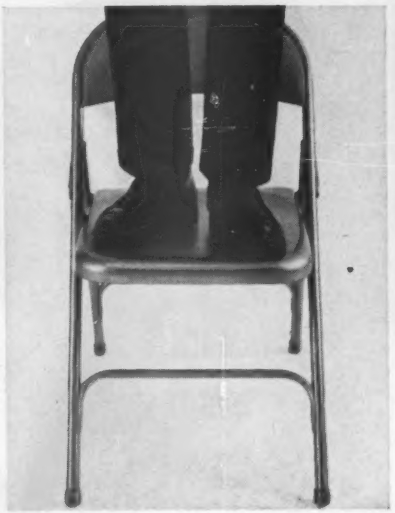
IBM

Samsonite CHAIR BUYER'S GUIDE

HOW TO BUY A FOLDING CHAIR IN 6 EASY LESSONS

1 STEP ON IT! Step hard on back rest (as shown). If chair is a Samsonite, observe: contour steel back won't give an inch. No back rest made is stronger—or more comfortable!



2 STAND ON IT! Stand on rear of seat; lean back. If it's a Samsonite, don't worry. Samsonite chairs *never* tip over. Perfectly balanced. Amazingly strong, too. (The man above weighs 240 lbs.)

3 "UNBALANCE" IT! Place book or pads under leg of chair. Sit, as shown. If chair tilts or wobbles, it's not a Samsonite. All Samsonite folding chairs are *self-leveling.*

4 "TORTURE-TEST" IT! Lift front legs off floor; "walk" chair forward and sideways. Only super-strong construction (Samsonite's electrically welded tube steel) can take this kind of punishment repeatedly.

5 FOLD IT! Grasp chair back; put foot on cross brace; pull gently. Samsonite chair will fold easily. (While you're at it, place finger in seat hinge. No danger. Samsonite *safety* hinge can't pinch.)

6 SIT IN IT! Instantly you'll know the difference. Observe that Samsonite folding chairs are contour-designed (both seat and back rest) for maximum comfort. Good looking, too.

WANT TO KNOW MORE? For church, school, club, other group seating information, see your Yellow Pages or write: Shwayder Bros., Institutional Seating Div. Dept. OV-101, Detroit 29, Mich.

Samsonite
FOLDING CHAIRS

CLOSE-UPS

James E. Allen

WHEN THE New York State Legislature met in special session in August, it took only four hours to debate, pass, and send to the governor legislation reorganizing the New York City Board of Education. This high-speed process was possible because of a long, hard week of work put in by N. Y. State Commissioner of Education James E. Allen, the acknowledged author of the reform program.

The heated controversy over New York City's school board operation (see *Education Roundup*, p. 81) put Dr. Allen in the middle of a political squeeze play between upstate Republicans and city Democrats. While

Hague Studio

Author of N. Y. reform.

he altered his original proposals, politically Allen couldn't be affected—he is neither appointed by the governor nor elected by the people but is appointed by the State Board of Regents.

As the professional head of the New York State education system, Dr. Allen probably has more responsibilities than any other chief state education officer in the country. Drafting legislation for the special session was just one of many chores. His responsibilities include regulation of all public and private elementary and secondary schools of the state, public and private colleges, plus nine hundred libraries and more than four hundred museums, art galleries, and historical societies. As if these weren't enough, the N. Y. State Commissioner is also responsible for licensing of all professions in the state (except law), licensing of all motion pictures shown in public theaters, the state library program, state science service, and the historic site program. To handle this mammoth job, the education department has nearly 2,000 employees.

Besides this vast assignment of regulatory duties, the New York Commissioner also has judicial powers. He can resolve controversies within the public school system. Cases are presented to him in the same manner as to any court. One advantage of using the Commissioner is that he renders a decision much faster. Decisions of the Commissioner can be appealed to the courts only on the grounds that he exercised his authority arbitrarily. (The disputing parties don't have to appeal to the Commissioner but may use the courts, if they prefer.)

Dr. Allen has been associated with education since his earliest years. He was born in Elkins, West Virginia, where his minister-educator father was president of Davis and Elkins College. He received his elementary and secondary education in that city and AB from his father's college. Later he studied economics and public finance at Princeton and received his master's and doctorate in education from Harvard. He also has thirteen honorary degrees.

After World War II, Dr. Allen joined the faculty at Syracuse Uni-

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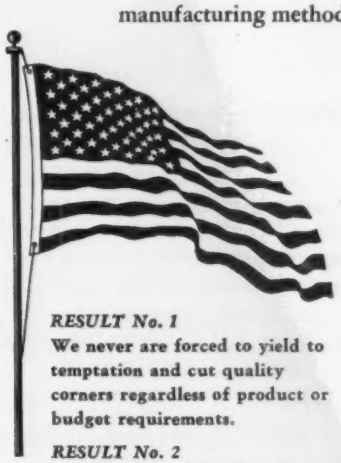

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IN CANADA write—American Optical Company Canada Ltd., Box 40, Terminal A, Toronto, Ontario

Close-ups (continued)

versity where he was assistant professor of education and director of the Bureau of School Services. In 1947 he went into the N. Y. State Department of Education as executive assistant to the Commissioner of Education and became deputy commissioner in 1950. In 1955, at the age of 43, he was named commissioner. He was the youngest man to hold the title in the history of the state. Apparently he likes the job because last January he turned down an offer from the Kennedy Administration to be U. S. Education Commissioner. No doubt, his N. Y. salary helped influence the decision: he earns $27,500 a year, receives an additional $5,000 for expenses, is provided with a chauffeur-driven car, and lives rent-free in an $85,000 home near the state Capitol.

Even though Dr. Allen prefers to keep aloof from politics, the New York City dispute was not the first time that his name made front-page headines. He had only been in office a year when he ruled that a teacher who had renounced Communism "may not be dismissed for refusing to be an informer," a decision greeted by both praise and outrage. Another time he banned classroom posting of the Ten Commandments in public schools on the ground that the display stirred up "bitterness and dissension," even though he is himself an elder of the Presbyterian Church. ●

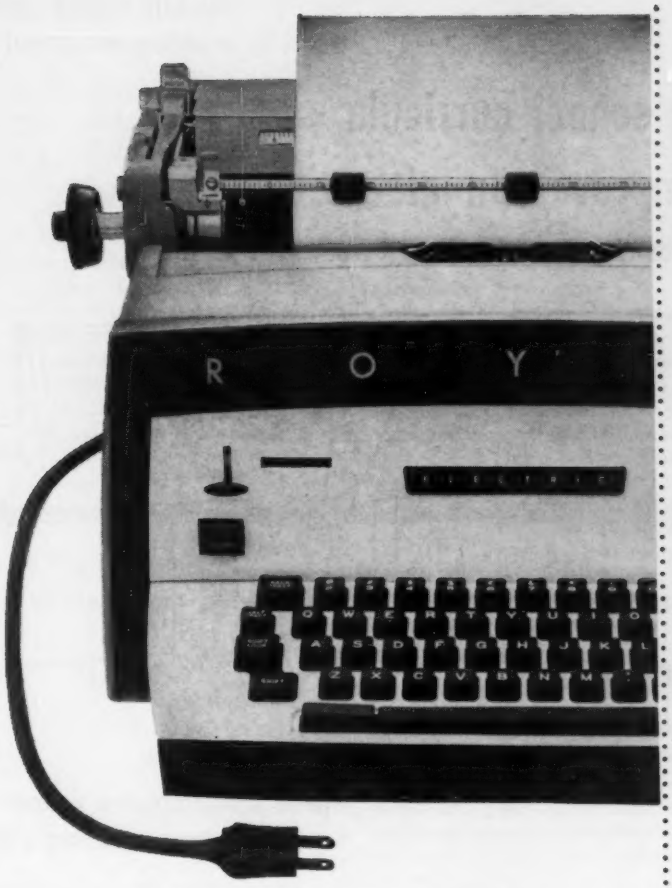
One of the big, personal problems facing every educational executive:

RETIREMENT

Read how others have faced it—and have solved it—in the next issue of

OVERVIEW

Circle **OV-223** on reply card, last page



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But are your classrooms equipped with *enough* electric typewriters to give your students *effective* electric typewriter training? Is the number of machines you have now sufficient for both your beginners and advanced students? Your Royal Representative will be happy to discuss this subject with you and demonstrate the modern new Royal Electric right in your own classroom or office.

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NAME:_____ TITLE:_____

SCHOOL:_____ CITY:_____ STATE:_____

8 ways to enrich school curricula and improve administration

...through an economical sound-communication system

The console shown here is the central control of an Executone sound-communication system for an average-sized K-8 or secondary school. Located in the General Office, it handles switching, programming, transmission and power amplification for all the services described below—and others that your special requirements may suggest. Its 5-channel capacity eliminates the need for more than a single conduit for signals or communication between any two points in the system. Identical functions are available in a vertical console, for use where office space is at a premium.

Supplement the teaching program with sound

Classroom audio-aids can give students access to sources of important teaching materials . . . can place each class in closer relation to the school and the world around it . . . can help develop each pupil's critical faculties. Leading educators value the availability of:

Radio broadcasts: speeches; music; coverage of special events; interviews; important dramatic presentations; sessions of Congress; etc.

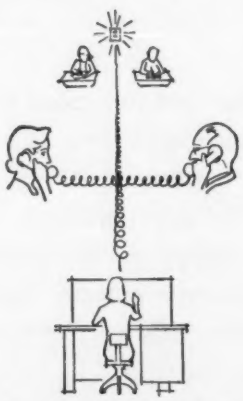
Recordings: from an ever-increasing fund of educational material on tape and discs.

Transmissions from other parts of the school: student musical programs; sports events; etc.

Recording and play-back facilities: for classes in choral and instrumental music; language and speech courses; drama workshops; etc.

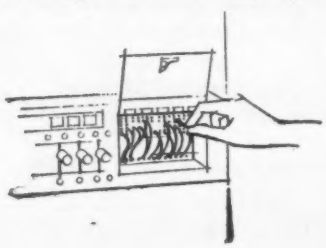
All these audio-aids can be supplied by a single Executone classroom reproducer . . . the same instrument that handles time signal, alarm and intercom functions. With a standard Executone system, any combination of rooms—chosen by selector-switches—can receive either of two simultaneous sound transmissions. Reproduction is of unusually high quality. Where recording and play-back are desired, rooms need only be supplied with microphone and tape-deck jacks. Amplification takes place at the main control console.

Speed administrative action: relieve over-burdened staff



Freedom to teach—and to work more productively—is one of the best answers to the chronic shortage of teachers and administrative personnel. Time savings increase in direct proportion to the staff's communication capabilities. Today, these can economically include: A) 2-way electronic voice intercom . . . between the office and any classroom . . . with complete privacy safeguards. B) Private-line room-to-office and room-to-room intercom . . . with call origination from any point. The Executone system offers all the above, providing 2-way remote-reply intercom through each classroom speaker . . . optional private-line handset communication using an independent channel carried by the same wiring.

Save money & space in providing variable time programs



Classes with varying time requirements need no longer be subject to an inflexible set of signals. But conventional time-programming equipment—including independent crossconnect panels, relay racks, classroom buzzers and wiring systems—is bulky and expensive.

The Executone system includes a remarkably compact, easily accessible peg-board programmer—which allows each classroom to be placed on any one of six different time programs within seconds. This function is built directly into either standard console! The costly conventional system is eliminated.

Circle OV-224 on reply card, last page

Preserve student discipline during unsupervised intervals

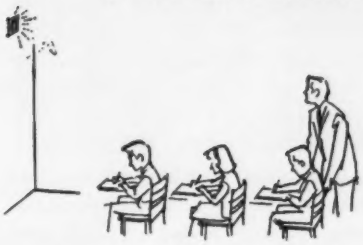
When teachers must leave their classes, the maintenance of discipline usually depends on the presence of a substitute. Faculty members may now be relieved of this non-productive extra duty. Unattended students can be monitored from the Office—through the Executone speaker—and notified by its open-line signal light that they are under remote supervision.

Control student transportation

Teachers find it especially difficult to keep order—and prevent delays—when restless students must await loadings of homeward-bound school buses. This condition is relieved when children are permitted to play freely—until summoned to the loading area in proper groups and directed to their buses.

This can be achieved through an inexpensive adjunct to the Executone system: a microphone jack at the loading area and speakers at loading and congregation areas. Both microphone and speaker wiring run in the same conduit. The amplifiers at the main console are utilized. Any available microphone can be plugged in at dismissal time.

Preserve the continuity of classroom activities



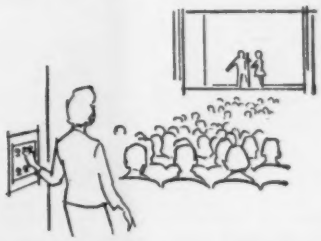
Communications in the modern school go a long way toward assuring uninterrupted class activities. But care must be taken that the facilities which make this possible are not themselves a disruptive influence. This is the case where calls make it necessary for teachers to drop what they are doing, to approach or handle equipment . . . or where a call interrupts a sound transmission.

Executone removes both of these contingencies. Through-the-speaker calls, for brief conversations, can be answered by the teacher from any point in the room—without raising her voice. And use of the optional handset channel for longer conversation prevents interference with concurrent sound programs.

Prevent confusion and panic in emergencies

Leading administrators have long felt the need for greater control of student bodies in emergencies. They seek alarm signal facilities to augment standard fire alarm systems—for such special contingencies as air raids. To control student movements in critical situations, they wish to make it possible for any staff member to broadcast voice instructions—without having been trained in the use of sound equipment.

In the Executone system, the same components used to produce time signals will also provide supplemental alarms. Executone furnishes duplicate signal generators—for fail-safe standby duty. For follow-up voice instructions, after an alarm, a staff member need only touch the 'emergency' bar at the Executone console. This overrides all other transmissions . . . allows him to speak immediately to the entire student body.



Provide quality-controlled sound for audience activities

No audience facilities are so intensively used as those in the modern school. Auditoriums and gyms serve not only during the school day—but also for adult and community activities . . . for socials and special events. Sound reinforcement equipment must be designed to high standards. And controls must be efficient. Conventional microphone mixing units—because of A-C power, ventilation and space needs can seldom be situated where they do most good.

An Executone system provides not only sound reproduction of highest quality, but also new flexibility in the location of controls. Transistorized preamplifiers and mixers are compact enough for concealment anywhere . . . have no special installation requirements.

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From Washington

The "College Congress"

THE EIGHTY-SEVENTH CONGRESS, which was expected to make history by aiding elementary and secondary education, appears destined instead to earn the approbation of just the colleges and universities.

Consider, first, the college housing loan program administered by the Housing and Home Finance Agency, which rounds out its first decade this month. Ten years ago, Norwich University borrowed $340,000 to build a 136-man dormitory. Since then, HHFA has loaned higher education $1.3 billion for housing and unions. Another $31 million was loaned for student nurse and intern housing, much of it under college auspices.

The program has been a brilliant success. HHFA estimates that 70 percent of the eligible institutions have borrowed. Half the 1,337 college housing loans have been to institutions that have borrowed at least once before. The current 3⅜ percent interest rate, which is based on the Federal Government's average borrowing cost, is highly satisfactory to most university business officials. Repayments have totaled $28 million during this first decade, with no defaults whatsoever.

Last spring Congress passed the Administration's housing bill; for college housing, the best is yet to be. HHFA is now authorized to lend the colleges $1.2 billion over the next four years, virtually equivalent to the amount loaned in the past ten years. No further congressional action will be required, since college housing funds may be borrowed from the Treasury without the usual annual approval of the appropriations committees.

Consider, next, the consequences of higher education's courteous willingness to step aside early this year when the Kennedy Administration was preparing its legislative time-table. The president had proposed giving the colleges $300 million per year in grants for construction of badly needed academic facilities. Passage seemed to be assured. A majority of congressmen appeared ready to acknowledge that, whereas dormitories and unions earn back their costs through student fees, it would not serve the national interest to finance academic facilities in the same way.

Administration strategists asked higher education's lobbyists to let Congress first enact federal aid to elementary and secondary education, by far the more difficult measure to pass. Spokesmen for the colleges were aware that the church-state issue might stall the whole process, but they deferred to the Administration.

The school construction bill met disaster in the House of Representatives. However, if the Administration and individual congressmen want to go on record in favor of education before facing the voters in November, 1962, higher education bills are the major measures pending with a reasonable chance of passage.

One is *HR 8900,* which Rep. Edith Green (D-Ore.) introduced as the Administration's slimmer version of its earlier college academic facilities bill. Instead of $300 million per year for five years, grants would be limited to $180 million annually over the same period—provided that the appropriations committees concur.

Funds could be used for construction or rehabilitation of classrooms and libraries, as well as for administration, maintenance, storage, and related facilities. Only theaters, gymnasiums, stadiums, chapels, and divinity school buildings would be barred. Recipients would have to put up $2 for every federal $1, and the new facility would have to increase enrollment capacity. Administration would be by state commission or agency.

Another bill Congress may well en-

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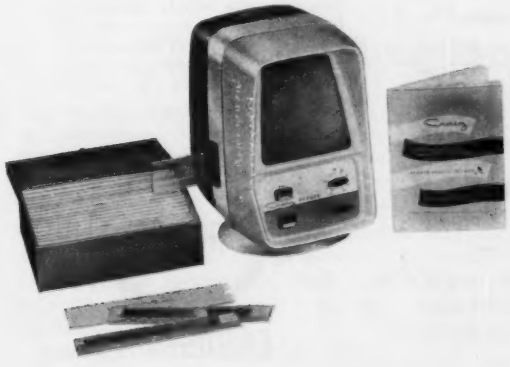

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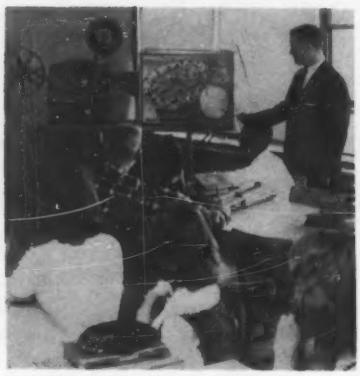

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Washington (continued)

act before the 1962 elections is *S 1072,* which would authorize grants for construction of medical, dental, osteopathic, and public health teaching facilities and scholarships for talented medical, dental, and osteopathic students. Up to $60 million could be appropriated in construction grants each year for a decade, plus $15 million for renovation of facilities. The federal share of construction costs would be two-thirds, more generous than under *HR 8900.*

The bill's scholarship provisions would give schools of medicine, dentistry, and osteopathy the product of $1,500 multiplied by one-fourth of their first-year class enrollment. In the second year, aid would be available for 25 percent of the first- and second-year students, and similar increases would subsequently be made for third- and fourth-year classes. In addition, the schools would receive $1,000 for every scholarship student.

S 1072 was introduced by Sen. Lister Hill (D-Ala.), influential chairman of the Labor and Public Welfare Committee, handling education legislation in the Senate. He prudently did not push his bill during the first session of the Eighty-Seventh Congress, although it had considerable support. Its prospects for passage during the second session appear even brighter.

Finally, there is Sen. Warren Magnuson's (D-Wash.) *S 205,* which would grant each state up to $1 million for construction of educational television facilities, with the grants matched dollar-for-dollar by the states. This bill has been passed by the Senate for the third time. In the House, the Interstate and Foreign Commerce Committee has approved a substitute bill, *HR 132,* which reduces federal grants by half. It should be possible to enact ETV grants before the final adjournment of the Eighty-Seventh Congress.

If these three bills, or even two of them, go on the statute books next year, higher education's Washington representatives believe that the Eighty-Seventh will earn the appellation of "the College Congress."—THEODOR SCHUCHAT

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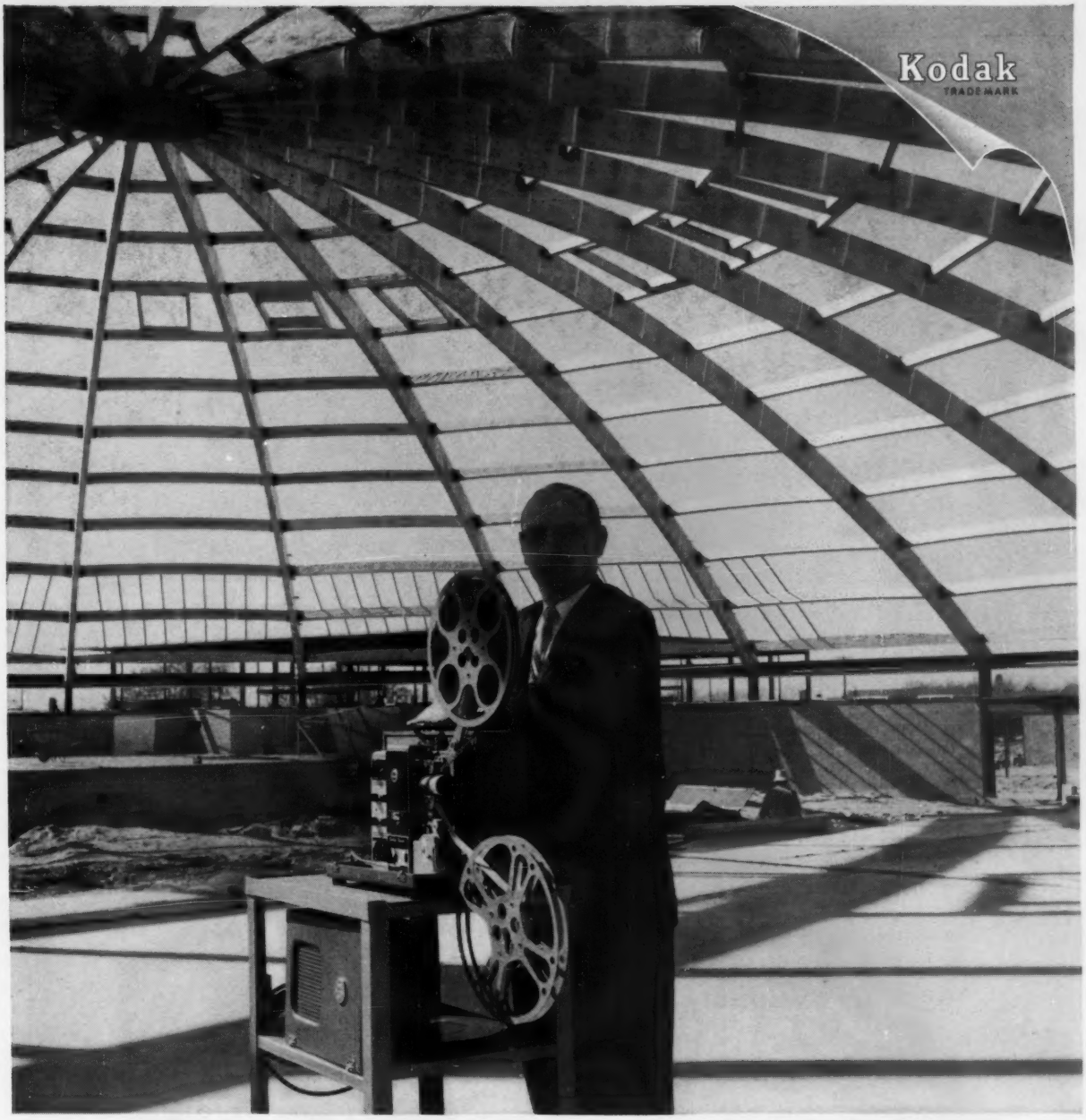

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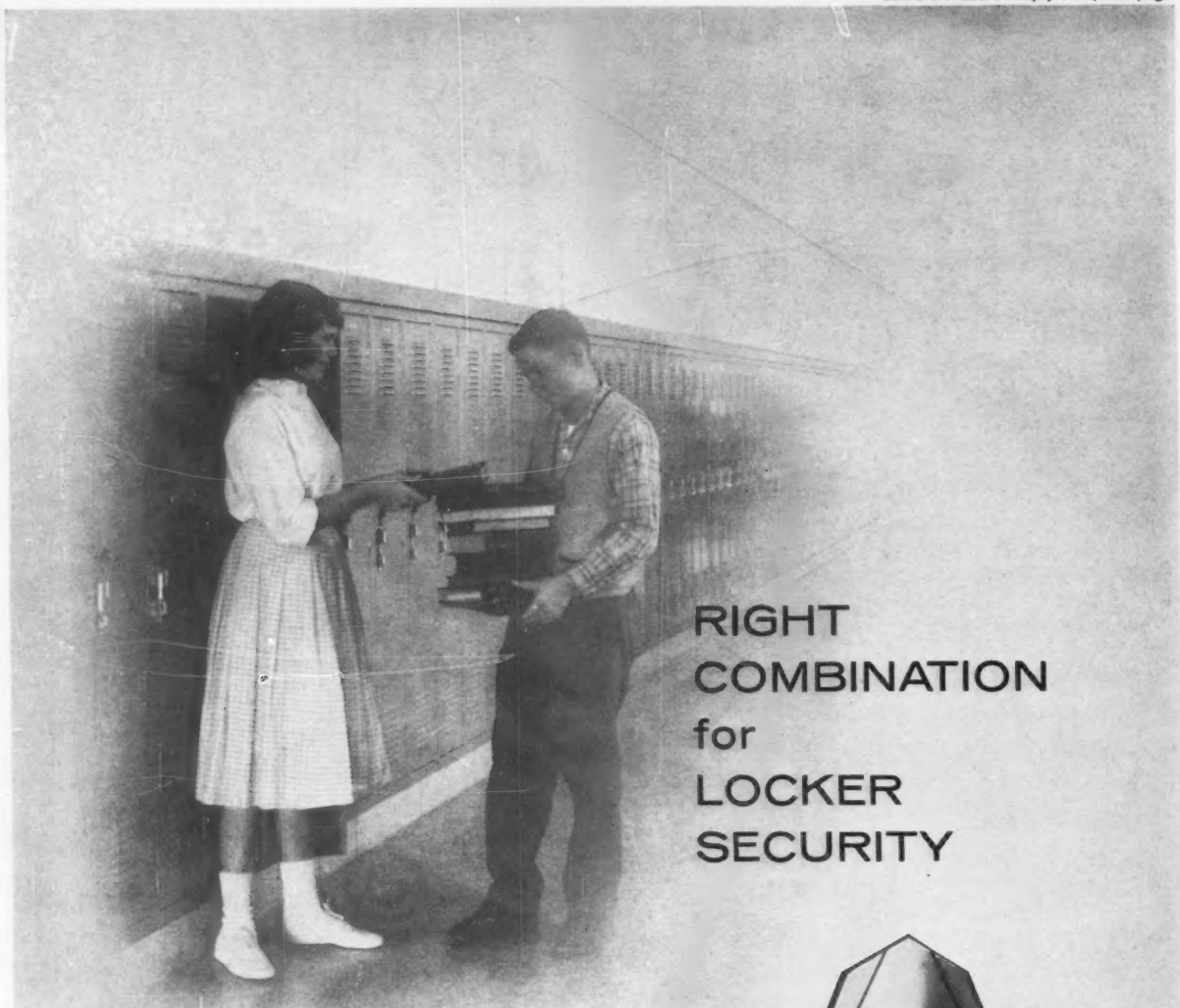

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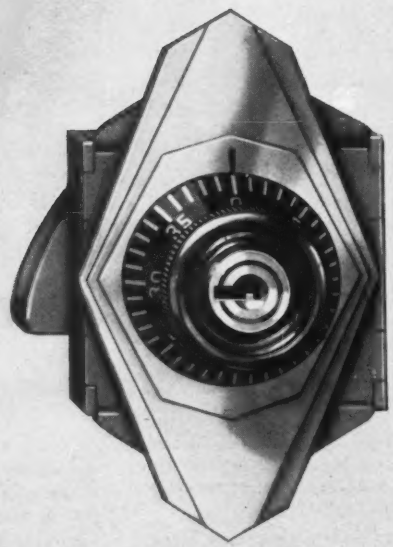

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THE BUSINESS OFFICIAL

A special report on the fastest-growing position in educational administration

AMERICA'S EDUCATIONAL institutions are spending $26.5 billion this year, not counting bond issue proceeds. This is big business indeed—about 4.5 percent of our Gross National Product. Individual budgets range from a few thousand to a half billion dollars. Day-by-day control of spending rests in about 38,000 public school districts, 16,000 non-public elementary and secondary schools, and a few more than 2,000 institutions of higher education—56,000 different spending units. According to HEW figures, private and public school per-pupil spending last year was about $440; higher education was four times that—$1,760 per student.

Who are the people who administer this business (often the largest single enterprise in a community)? In the major sense they are the superintendents, headmasters, presidents—the responsible chief administrator, whatever his title (except for a steadily dwindling number of small school districts where fiscal affairs are jealously guarded by boards of education directly).

But far the largest portion of our educational business is now administered by a single top business official directly related to the chief administrator. As for the title by which the business administrator may be known, the variety is tremendous. OVERVIEW's census found thirty-three titles listed for the chief business administrator in public school districts. Some examples: deputy superintendent; associate superintendent for business affairs; administrative assistant; business manager; business administrator; business coordinator; executive secretary; clerk-treasurer; business office supervisor; office manager;

bookkeeper; and tax assessor and collector. Whatever the title, the job is direction of business affairs.

In very small institutions this is a one-man job. But in sizeable organizations, the official in charge of business administration directs department heads, each of whom is responsible for a number of managers. Here the school or college business administrator becomes a "manager of managers."

Some of the variety of titles for the job is explained by the evolving understanding of the three areas of competence and responsibility involved: support of the educational function; concern with the business of budgets, buildings, and buses; and basic management. Such titles as "clerk," "secretary," "treasurer," or their combinations may denote a status set by statute or custom, but they are not inherently descriptive. "School business manager," or "school business administrator" are more descriptive, yet the history of divided responsibility and authority keep these from being universally acceptable. Missing is the statement of *relationship* to overall administration. "Assistant superintendent," or "vice president for business affairs" seem to satisfy the requirements of job description and denote relationship as well.

Making a House a Home

What is this business he manages? No single source gives the full picture, but textbooks and the ASBO's own commission agree in general on these areas of responsibility: finance, plant, supplies and equipment, transportation, food service (and housing in residential institutions), insurance, records and reports, and personnel (usually just record-keeping for instructional but services for non-instructional). Obviously the job requires a wide range of competencies, but any home-owner will recognize these as jobs normally required in keeping house. It's their efficient performance that provides the setting in which a house can become a home.

So with school business management. It is concerned with the setting. Its efficiency may be judged by ordinary business standards, but its effectiveness is measured by the degree to which it supports the teaching-learning process—or, to re-phrase, it is measured by how well it provides the setting in which an institution can become a school or college. An understanding of this accounts for the growing insistence that business management be a part of overall educational administration. Many an educationally experienced business manager has discovered for himself that by his control over plant, maintenance, and budget he can affect the educational process—and its public image—more immediately than can the superintendent or any other educational leader.

With his competence in business affairs and understanding of their role in the educational institution he still needs a third skill—management. He cannot spend his time doing the many business jobs or even often work directly with those who are doing them. He can and does work with those who themselves are managers and, therefore, must know how to delegate and hold accountable, how to stimulate and help others in turn to lead, plan, delegate, and evaluate. Here he becomes a manager of managers. This is a rare competence and one that commands rich rewards in any organization.

Remnants of Dual Control

The professional school or college business manager is a fairly recent invention. Long after boards were driven to consign their educational leadership to a professional, they clung to the minutiae of day-by-day business affairs. As in so much of education, the whole range of evolution can still be observed.

There are school districts in America now where the single, elected trustee orders the chalk, repairs the roof, and buys the globes. In some larger districts the board employs a clerk to do this—usually under close supervision of a committee on budget, one on buildings, etc. There are others where practically all business functions are performed by one (and, even more incredibly, by two or more) independent department chief directly responsible to the board. This matter of dual control is no longer the issue it once was. A rapidly growing number of boards of education and most boards of trustees are now genuinely committed to the principle of delegating all administration to a single executive, holding him accountable for every function, and furnishing him the specialized administrative staff he needs. Perhaps the rapidly diminishing direction by owners and evolution of professional management in industry has set the climate.

The Full-Time Business Official

A recent study by New York State's Council for Administrative Leadership supports the growing picture of assistance given the superintendent in business affairs. The list of principal functions now delegated by the superintendent include eight not commonly listed as recently as six years ago: insurance, plant maintenance, buses, school lunch, internal accounts, payroll, debt service management, and specifications for supplies and equipment. It also found that the typical central school district of 600–1,100 pupils had a part-time business official (often combined with some teaching assignment) and that above 1,100 this was typically a full-time job.

The 1961 *American School and University* census shows the following pattern in the nation as a whole (the percent in each case is of the number of districts who listed a full-time business manager on its staff):

District size (enrollment)	*Full-time business manager*
25,000-and-above	94%
10,000–25,000	94%
5,000–10,000	75%
2,500– 5,000	53%
1,000– 2,500	27%

Since a full quarter of these positions were reported to be new within the past three years, it takes no prophet to foresee that in a relatively short time almost every school district enrolling above 2,500 students will have a professional business manager. With the average expenditure from current funds now $440 per public school

(continued on page 46)

Profile of the ASBO

IN 1910 THE National Association of School Accounting Officers was formed primarily to work for standardization of "fiscal, physical, and educational data" of school systems. The organization grew slowly until 1922 when it merged with the National Association of School Building Officials, under the new name: National Association of Public School Business Officials.

Since 1924, business managers from Canada have attended and now make up 10 percent of the active membership. (This year's convention is the third one held in Toronto and the 1959 president was the third Canadian to hold that office.) Their presence has always been welcomed and the full name of the organization was formally changed in 1951 to reflect their participation. Association of School Business Officials of the United States and Canada is now the official name, but almost universally it is called ASBO.

For years all direction was provided by the elected officers and great tribute it was to them that it kept going and even grew. John S. Mount of Trenton, New Jersey, served eleven years from 1924 on as secretary, with Henry W. Hutson of the same city joining him as treasurer in 1926. H. W. Cramblet of Pittsburgh followed Mount for twelve years, with Albert Austermuhl of Camden as treasurer. Then in 1946 Harley W. Anderson took the combined job and gave continuous direction and support for ten years. Illness forced him to give up this position just as the constitution was changed to make the executive secretary the full head of the central office, appointed by the board of directors. Dr. Charles W. Foster, then business manager in Thornton Township (Illinois) High School, was named to replace Anderson.

This was a fateful appointment. Dr. Foster ("Chuck" to innumerable friends) brought limitless energy, enthusiasm, and insight to the job, and himself personified the newer type of business manager. A teacher, training man in industry, and business manager-secretary, his graduate education has been in school business management (Ed.D. from Northwestern, and currently candidate for Ph.D. in administration at the University of Chicago). The ASBO membership directory now lists 2,299 active members, 269 associate, 136 school board, and 50 other members for a total of 2,761.

One issue which continues to shake each convention is on the way to being solved: Should the business manager's preparation be in education or in business? This is becoming recognized as an artificial dilemma, painful only as it seems to reflect on some excellent present incumbents. When it gets onto the less-touchy matter of competence and understanding there is pretty universal agreement that both backgrounds are important.

The other potential dilemma is also resolved by a mutual cordiality: Is it an association of *chief* business officials or of *all* business officials? A breakdown of the 2,299 active membership shows that 1,432 are chief business officials and 539 are "subordinate" business officials (the remainder are school superintendents, office of education personnel, professors, students, and honorary or life members). In other words, 70 percent of the members have the whole gamut of business affairs to worry about. When it comes to management many of the "subordinates" have much larger budgets and more staff than the business managers of small districts.

The important fact for the health of the organization is that over 60 percent of the school districts which enroll 1,000 or more children are represented in its membership. If the history of other national organizations is any indication, this representation means that ASBO has passed the "swing" point. Membership in it now will be the expected mark of the school business official who takes his job seriously. ●

The Business Official

(continued)

student, the annual "business" of a district of 2,300 students is a million dollars. Such a sum certainly seems to justify a fully qualified administrator of business affairs.

What constitutes full qualification is a matter of controversy. The survey asked the present incumbents about their primary background and found the weight in favor of education:

District size	*Education*	*Business*	*Both*
25,000-and-above	79%	14%	7%
10,000–25,000	60%	28%	12%
5,000–10,000	68%	25%	7%
2,500– 5,000	60%	30%	10%
1,000– 2,500	46%	46%	8%

Most of those who thought of themselves as other than clerks belong to one or more national organizations. The Association of School Business Officials (see "Profile" p. 45) is made up of all ranks of people working in the business side of schools, but the large preponderance of its active membership is of top business managers. The AASA ("Profile" in April OVERVIEW) is open to all school administrators, but is the central organization for superintendents. The survey showed these memberships of business managers:

	ASBO		*AASA*	
District size	*alone*	*Both*	*alone*	*Neither*
25,000-and-above	46%	37%	7%	10%
10,000–25,000	56%	20%	7%	17%
5,000–10,000	56%	15%	11%	18%
2,500– 5,000	45%	16%	10%	29%
1,000– 1,500	36%	8%	8%	48%

There was also a narrower-than-expected range of percentages of incumbents who had been recruited from outside the system instead of promoted from within—either from other educational business jobs, from positions in industry, or directly from college:

District size	*Incumbents from outside the system*
25,000-and-above	36%
10,000–25,000	44%
5,000–10,000	52%
2,500– 5,000	55%
1,000– 2,500	59%

Although these figures are undoubtedly lower than they would be for the chief school administrator, they represent a surprise to those who think of the school business manager as a commercial or shop teacher assigned to the job or a building superintendent or accountant promoted from within.

If the recent past is any indicator, there is a growing market for well-qualified people in this field. In fact the survey asked the chief school administrator if he felt his central staffing was adequate, and if not, to list the top-level position he most wanted to fill next. The kind of position most commonly sought was in the business field:

District size	*Business official listed as top-priority need*
25,000-and-above	0 %
10,000–25,000	2½%
5,000–10,000	8 %
2,500– 5,000	15 %
1,000– 2,500	20 %

There are hundreds of districts which warrant an assistant for business affairs, where the superintendent puts that as his most pressing need. With fewer small districts and more million-dollar annual budgets, the number of school business managers should double in the next few years.

Non-Public School Business

In the non-public schools, about 90 percent of the enrollment is in Roman Catholic schools, the largest number of which are parish elementary schools. These are administered, including their business affairs, by the parish priest. In some dioceses he is given help in the business side through the office of the diocesan superintendent. The Sister principals increasingly see salesmen, attend exhibits, and recommend purchases to the pastor, but there is no perceptible trend toward anything but added clerical help in business affairs of parish schools. The diocese itself operates an increasing number of secondary schools and their business management centers in the diocesan offices.

Independent schools are focusing their business affairs in an assistant whose work is more comparable to the colleges when he has residences and food service to handle. They have their own organization—the Association of Business Officers of Preparatory Schools.

College and university business officers are at last coming together in a national association. For some time there has been a loose federation of the geographical Associations of College and University Business Officers. Now the growing awareness of common problems and the increasing role of the Federal Government combine to underline the desirability of one large association.

There are several national groups of sub-institutions (the Association of College Unions and the National Association of College Stores) and of specialized officers (the National Association of Physical Plant Administrators and the Association of College and University Housing Officers). The subjects of their conferences are much like those of the ASBO: organization of the business functions, personnel practices, campus planning, the National Defense Education Act, and inevitably college business management as a profession. Their associations in general are as strong as the secretary or some other one officer. Some time they may merge into one association.

In every kind and level of educational institution the administration of business affairs is an occupation in transition—feeling its way towards a profession. It looks now as though in the public schools this profession will be a specialty "business affairs" under sub-division "administration" in the larger profession "education." ●

U.S. SCHOOLS ABROAD

With little money and a lot of initiative, Americans are re-creating our education overseas

by John J. Brooks

WHAT HAPPENS to the education of an American child when he lives with his parents in Khartoum or Mogadiscio, Cairo or Tehran, Taipei or Katmandu? American civilians abroad are a vast and growing group. They currently number about 100,000, and they have front-line responsibility for the success of our crucial programs of diplomacy, industry, economic aid, and technical assistance around the world. Like all parents, they want their children at their sides, even when the father's post is in some newly-emerging area of Asia, Africa, and the Middle East.

So strong is the wish to keep children in the family circle that efforts of the U. S. Government and private industry to recruit top-calibre men and women for overseas service are severely hampered when schools in the host country are inappropriate for their children.

Some of these young Americans overseas are able to go to class in military dependents' schools (especially in NATO countries), in missionary schools that have opened their doors to U. S. children, in private schools (mostly in Europe, but some in Asia and Africa built during the colonial era), in company schools established by international industries (largely in the Middle East, Asia, and Africa, where no satisfactory schools exist locally), and the large international schools (mostly in Europe), built to accommodate the postwar influx of Americans.

But in many cities and towns of Asia, Africa, and the Middle East, and even some parts of Europe (Belgrade, Warsaw, and Moscow, for instance) American parents find that schools operating locally are unavailable to their children or inappropriate for them. Local law may prohibit admission of foreign children for nationalistic reasons or simply for lack of classroom space. Even if the local schools are open to Americans, it may be impractical for them to attend because of differences in curriculum sequence or subject-matter emphasis.

In areas where *no* school is available and suitable, American parents overseas during the past fifteen years have compounded ingenuity, sweat, and service with whatever materials they could lay hands on, and created the schools themselves. To date, without public sponsorship and with little or no private support, overseas parent groups have organized seventy schools in forty-five countries of Asia, Africa, the Middle East, and Europe. They serve in the schools not only as the governing body but as teachers, librarians, carpenters, caretakers, and curriculum experts.

Although some of the seventy schools have been founded by international communities, the majority were organized by overseas Americans. Then, in country after country, when the school has been launched and the American children are once again in the circle of school life, room has been made in that circle for the children of other nationals serving in the same location. Of some eighteen thousand children attending the seventy schools,

Overseas parents have organized 70 schools in 45 Asian, African, and European countries. Top pictures show the American School of New Delhi. Below are the Jalaprathan International School of Thailand, New Delhi school's classroom, and a Christmas pageant at the Karachi American School in Pakistan.

more than six thousand are now drawn from seventy-five nationalities.

Of the 12,000 U. S. children enrolled, only half are from families in government service—the personnel of our embassies, the International Cooperation Administration, the U. S. Information Service, and related contract programs. Parents of the other families hold outpost jobs in the United Nations, international service agencies, philanthropic organizations, and business and industrial concerns.

A description of one overseas school offers a vivid picture of the origins, growth, and problems common to them all (even though they are located in cities as far distant from one another as Sapporo and Djakarta, Manila and Tangier). In 1952, a group of Americans assigned to a new area of international activity in the Middle East discovered that the local schools had neither space nor program for their children. They quickly formed a planning committee, framed a constitution, discovered a room for classes, gathered a few textbooks, and persuaded a couple of the wives to become teachers. The curriculum was largely based on correspondence courses. They opened school with an enrollment of five pupils. Next year there were thirty. In three years the group had increased to ninety and, during the next four years, the student ranks swelled to 410. Money for operations and for expansion comes almost solely from tuitions, which range from $120 a year for nursery children to $400 for high school students.

Currently, this school employs forty-four teachers, of whom a majority are wives of overseas officials. Most are Americans, three are local nationals, and others are Dutch, Chilean, Polish, English, and Australian. Only half the faculty hold college degrees and have had teacher training. However, less than half have had prior teaching experience.

Twenty-two embassies send their children to this school. The U. S. Government is represented by 280 children; international service agency families provide another several dozen; the others are children of the international business community. In all, thirty-five nations, including the host country, are represented in this one Middle East school.

The International Schools Foundation of New York and Washington, organized in 1955, recognized that the overseas community schools are indispensable as personnel facilities for the thousands of parents who maintain the wide range of our programs abroad. It realized that the schools represent a new educational phenomenon, an intercultural frontier. But it saw too that they face awesome problems of isolation, inadequate recognition, and lack of professional and financial support.

In late 1959, ISF obtained a matching funds grant from the Ford Foundation to establish a pilot program of educational and general liaison services to meet some of the more pressing needs of these schools. (Bi-national schools available to U. S. children in Latin America have been served since 1943 by the Inter-American Schools Service in Washington, D. C., which employs funds appropriated by the Congress for this purpose.) With an additional grant from the Rockefeller Foundation, last year ISF surveyed the most urgent problems of these schools. From field visits to forty-three of the schools and written responses from twenty-seven others, a clear picture emerged:

- The income of most overseas schools consists almost solely of educational allowances from government and industry—money which cannot be used for capital growth and which is little related to operational needs.
- The extremely high annual turnover among board, parents, faculty, and students prevents any continuity in the school's program, activities, and leadership.
- Lacking the normal sources of professional and financial support, many overseas schools continue to use correspondence courses as a curriculum base; others have indiscriminately adopted specific courses of study devel-

Dr. Brooks is president of the International Schools Foundation in New York.

oped by schools at home to meet the needs of domestic American communities.

• Most of the schools lack the rich variety of texts, library books, teacher training materials, and other publications routinely used by good schools at home.

• Appropriate admissions, placement, and transfer instruments, as well as testing and guidance programs, are absent from almost all overseas schools, minimally adequate in others.

To help the schools overcome these problems, ISF maintains an advisory and liaison service on resources available through the U. S. Government and from nongovernmental educational organizations. It also offers individual schools professional help in recruiting administrators and teachers, selecting and shipping professional training materials, curriculum development, selecting and shipping school supplies, and guidance on testing and admissions and transfer processes.

Even though they are beset by a dozen critical problems and hampering circumstances, the overseas schools quickly find themselves cast in a second role: in the eyes of the local community they are demonstration centers of western democracy, cultural values, and educational excellence. To play this role adequately, a school program must include some kind of participation on the part of the host community—particularly, the integration into the school of numbers of their children.

An intriguing third role the schools might play is that of laboratories for experimentation in international education, since these unique schools so frequently house student populations who have had prior schooling in differing educational programs and who hold varying cultural aspirations. They offer rare opportunity to test the competing claims in the international dialogue of educationists today. For example: is there a core curriculum of information, attitudes, and skills that might profitably become the common learnings of *all* the world's children and future citizens? Does each major system of national education possess some special educational advantage that *all* might adopt?

Overseas students spend from two to ten of their most formative years absorbing the culture and languages of world areas little understood by most of their elders. With enriched curriculums and increased numbers of specially trained staff, many overseas schools could help develop the corps of overseas American youth into citizens, teachers, political leaders with significantly enhanced world understanding.

But the overseas schools must first gain the concern of American educators, not only as individuals willing to serve in the schools, but as administrators willing to extend to those schools the advisory and material resources of U. S. schools, colleges, and educational agencies. Only then can they become the demonstration centers and the international laboratories for which they have such unique potential. •

AIR CONDITIONING AND THE LEARNING ENVIRONMENT

ALMOST THREE new educational buildings are being completed every day with full or partial air conditioning. Ten years ago practically no school district and few colleges included air conditioning as part of their engineered learning environment. Many districts and institutions still hesitate, fearing charges of extravagance; but growing numbers of schools and colleges are accepting air conditioning—planning for it, paying for it, and gratefully enjoying it.

Two major obstacles still seem to stand in the way of the universal provision of school air conditioning. First, neither all educators nor all architects have fully accepted the availability and financial practicality of systems controlling high temperatures and humidity. Second, boards of education, trustees, and lay citizens are still not fully aware that air conditioning brings actual increases in building use and educational effectiveness.

Many a citizens group or administrator balks at cost factors. Cost is important, naturally. Regardless of building adaptations made possible by air conditioning, there *is* an added cost, though it is much less than at first imagined. But air conditioning's real value is in terms of educational productivity, the important—albeit hard to measure—goal.

Schools and colleges are places of learning. The first considerations of their plant design are *the welfare of the occupants* and *improvement of their learning opportunities.* Air conditioning is gaining recognition as contributing to the ideal learning environment. As such, it appears in more and more school and college designs.

The challenge for education is to pile up evidence on the contribution air conditioning makes to an efficient learning environment, and then to guide architects and engineers toward the construction of air-conditioned buildings within approved budgets. It sounds difficult; yet this very challenge has been met in communities like Pinellas County, Florida; Alton, Illinois; Sikeston, Missouri; Lexington, Kentucky; and many others, north as well as south.

In Pinellas County, significant and carefully controlled studies are underway in two new junior high schools, almost identical in construction cost, but with air conditioning provided in only one school. OVERVIEW went to Pinellas as a member of a two-day evaluation conference. The two junior high schools, the air-conditioned one designed by Bruce and Parrish, and the other by Charles L. Colwell, were visited and critically examined by a group of architects and educators, selected by OVERVIEW and *Architectural Forum* at the request of the conference sponsor, the American Air Filter Co., Herman Nelson Division.

Highlights of this conference were roundtable discussions with all critics freely commenting on what they had seen at Pinellas. These comments (separately reported here), like all data to be gathered at Pinellas, serve as a guide for planners of future elementary and secondary school designs that will include air conditioning.

Following up the 1960 Building Survey of its sister publication, *American School and University,* OVERVIEW found unanimously favorable reactions to air-conditioned buildings occupied last year. In Sikeston, Missouri, a new $975,000 senior high school, designed by Buchmueller-Whitworth Associates, is a fully air-conditioned campus plan which utilizes a heat pump refrigeration system for heating and cooling. Six major buildings are heated or chilled by water circulated through insulated piping carried on the covered walk canopies. Students can actually see the entire heat pump installation and natural-gas-driven engine through a window wall of the machinery building. Superintendent Lynn Twitty estimates that the entire 66,057 square feet of enclosed area can be cooled for $500 per month. He reports, "The comfort factor will increase our summer school enrollment and make it easier to recruit faculty members. We have about the same area of glass as in a conventional building, with some movable windows for natural ventilation during temperate

weather."

The new Gilson Brown Elementary School in Alton, Illinois, designed by Keeney & Stolze Architects, is fully air conditioned. "Air conditioning seems to be working satisfactorily in every respect," Superintendent J. B. Johnson reports. "The school is used by summer high school students, 80 percent of whom are taking enrichment courses."

Another air-conditioned elementary school in operation just one year is the Vose School in Beaverton, Oregon (James C. Gardiner, architect). The first circular school in that state, it has a cafetorium at the center surrounded by a hallway and nine perimeter classrooms. An air-to-air heat pump provides heating and cooling. Powered by electricity, the system has had no mechanical failures and one year of use has produced "gratifying results," according to Principal Rod Kvistad.

Many school and college buildings in New England are fully or partially air conditioned today. Phillips Exeter Academy in Exeter, New Hampshire, had its new $420,000 music building (architects Shepley, Bulfinch, Richardson & Abbot) air conditioned because it is heavily used during summer months. The $75,000 heating-cooling system operates with 55° well water. Overall operation and maintenance expenses will be approximately $1,000 yearly. "If we were able to operate on a year-round schedule," said business manager Theodore Barry, "we would probably consider air conditioning our dining halls and dormitories."

In Florida, where heat and humidity from the Gulf raise the comfort index to an uncomfortable degree (as shown in the Pinellas County observations), air conditioning is a long established reality in many colleges and universities. At Pensacola Junior College a new student center (Hugh J. Leitch, architect) was air conditioned and heated for approximately $2.71 of the total $15.33-per-square-foot cost. "From an educational standpoint," notes President Henry L. Ashmore, "the air conditioning has been completely satisfactory. For year-round use in Florida a building almost *has* to be air conditioned."

Similar conclusions dictated completely air-conditioned buildings at the campus of brand-new University of South Florida in Tampa. Structures are heated and air conditioned from a central utilities building. Two 55-ton steam absorption refrigeration units provide chilled water at 45°. "Students, faculty, and staff members are very pleased with the air-conditioning systems," the plant engineer reports. "We had expected about 30 percent of the fall enrollment for our first summer school. However, we had 50 percent of that number enrolled in summer school and over one hundred of these were June, 1961, high school graduates embarking on their college careers three months earlier than normal."

There are college campuses where new, air-conditioned buildings operate simultaneously with older, non-air conditioned plants. At North Texas State College in Denton, for example, the old buildings are closed in summer and

WHAT THE EXPERTS SAY ABOUT PINELLAS COUNTY'S CONTROLLED STUDY

PETER BLAKE managing editor, Architectural Forum: *"In Pinellas' non-air-conditioned school the hot debilitating effect was present everywhere —in the corridors, outside, under the canopies, everywhere. One of the nice things about the air-conditioned building is that it gives a great many varieties of experience. It's cool in the rooms, warm in the corridors; at the end of the corridors are little bits of sunlight and grass and trees, etc. You have some views this way; you have light coming in through the skylights. I don't see why that might not be just as exciting, just as stimulating, and maybe more stimulating than a constant view of a green and gray hell outside a glass wall, while you are sweltering in the heat."*

JOHN LYON REID architect, San Francisco: *"There has been some confusion about what air conditioning can permit and what it can't permit. The Florida law being what it is —requiring natural ventilation unless it is waivered—almost means that to get natural ventilation you have to build in small units. On the other hand, air conditioning* permits *but does not* require *large areas. It permits compact areas. I don't think you can air condition a small area exposed on four sides with quite the same efficiency as you can a large, compact area. It depends on what you want your educational program to do for you. Air conditioning gives you an added dimension and an added strength. It allows you to do certain things you can't do without it."*

ELLIS A. JARVIS superintendent, Los Angeles Schools: *"When we think in terms of using more audio-visual aids in schools and giving more attention to television teaching, there are some real opportunities that we should not overlook. In our conventional schools we have a constant problem of light control. We try drapes, Venetian blinds, and shades and we aren't completely satisfied with any of them. Now we are thinking ahead to the extent of providing at least the conduit for future closed-circuit television. Certainly, we are thinking in terms of the proper environment under light control. This is a natural advantage in the air-conditioned school we have been looking at. We have to consider it one of the big 'plus' items here."*

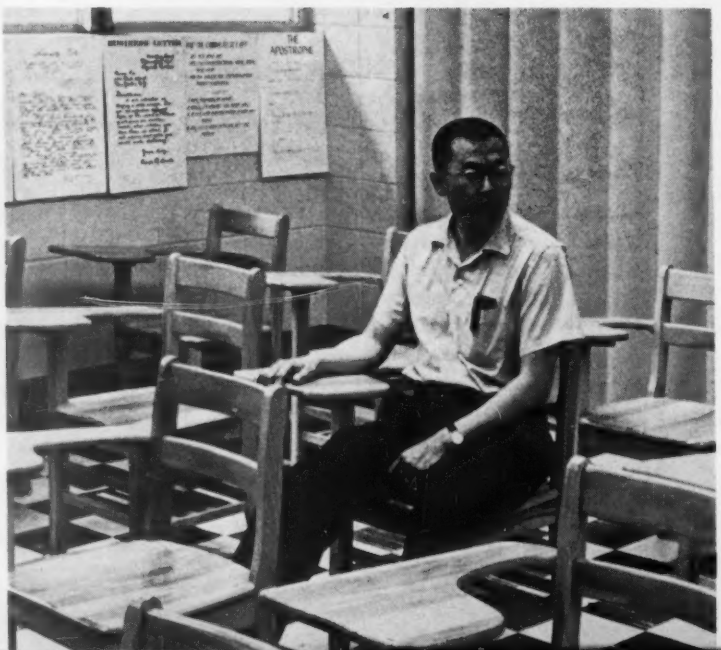
GYO OBATA architect, St. Louis: *"Circulation is a problem in a compact school. One criticism of this air-conditioned school is that one is always in a narrow, horizontal space—there is no relief from this, no feeling of verticality. I think the ends being open does help, but I think one chunk of space in the center would have* really *helped."*

JONATHAN KING secretary, Educational Facilities Laboratories, Inc.: *"One morning we sat in Pinellas' non-air-conditioned school and watched everybody looking soggy and sitting uncomfortably on sweaty chairs. However good the educational program is in the other air-conditioned school, at least it has a real potential for sound learning activity because of its comfortable environment."*

Henry Wright Jonathan King Peter Blake A. B. Shaw Gyo Obata Joseph Amisano Edwin Lederer Alonzo Harriman

Myron Ehrenberg photos

Charles Colwell, Ellis Jarvis, Shaw, Robert Savitt, Frank Platt, Obata, Charles Healy



Gyo Obata

the air-conditioned structures are put to maximum use. "The amount of work a class can do with air conditioning has not been documented by us," President J. C. Matthews reports, "but we can leave a building under our own power in 100° weather after doing a day's work equivalent to any other day in the year. Our conclusion is that air-conditioned buildings which are going to be used 75 percent of a 39-hour week, and for twelve months rather than nine months, are an economy in plant operation, not an extravagance."

It is not unusual for a university, after success with one air-conditioned building, to decide that all future buildings will be air conditioned. This happened at Temple University, Philadelphia, where the first completely air-conditioned building began operation in 1956. John M. Rhoads, vice president for general administration at Temple, finds the faculty reluctant to teach in any but air-conditioned quarters. He notes that such quarters cost only slightly more to operate: "We estimate that the air-conditioning phase of a building costs about 25 cents per square foot per year to operate. We are sold on the desirability of having air-conditioned facilities not only because of the high temperature and humidity here, but also because it enables us to shut out completely the noise from adjacent streets."

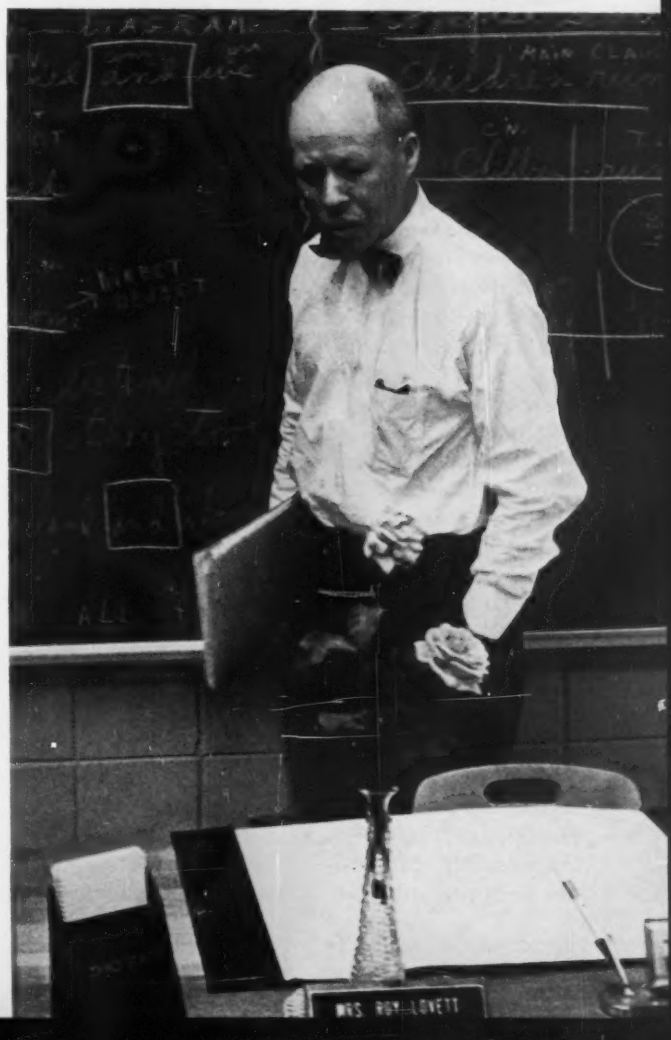
Even dormitories, where a student's room stands empty while he attends classes, are being constructed with air conditioning, and no charge of "luxury" is made. University of Kentucky in Lexington has completed one year of operation of an air-conditioned dormitory (architect: John F. Wilson & Associates) for 575 men students. There is a small extra charge for living space in this dorm, but students have not balked at this fee; in fact, reservations for September, 1961, exceeded the available spaces. Dr. Frank D. Peterson, vice president of the university, reports, "We encountered no particular problems in planning this building, but air conditioning did add $100,000 to the total $1,800,000 cost. So far our maintenance and operation costs have been satisfactory. We are pleased that this building was air conditioned.

Air conditioning is past the "iffy" stage. It remains only for educational leaders to investigate what it can add to the learning environment in—and use of—a particular building. Experienced architects and engineers should be able to work within any reasonable budget to supply all that a community or institution wants in its educational buildings—and this includes air conditioning. As more first-hand information is gathered about air-conditioned educational buildings, as we know more about air conditioning's effects on learning and teaching, on plant design, on plant financing and function, the more acceptance we will find for it among taxpayers, administrators, and designers.

Whether from Pinellas County, Sikeston, Alton, Philadelphia, Lexington, or Pensacola, we know one thing about air conditioning: it satisfies. Once the initial cost hurdle is passed, air conditioning proves its worth as part of a balanced educational environment. ●

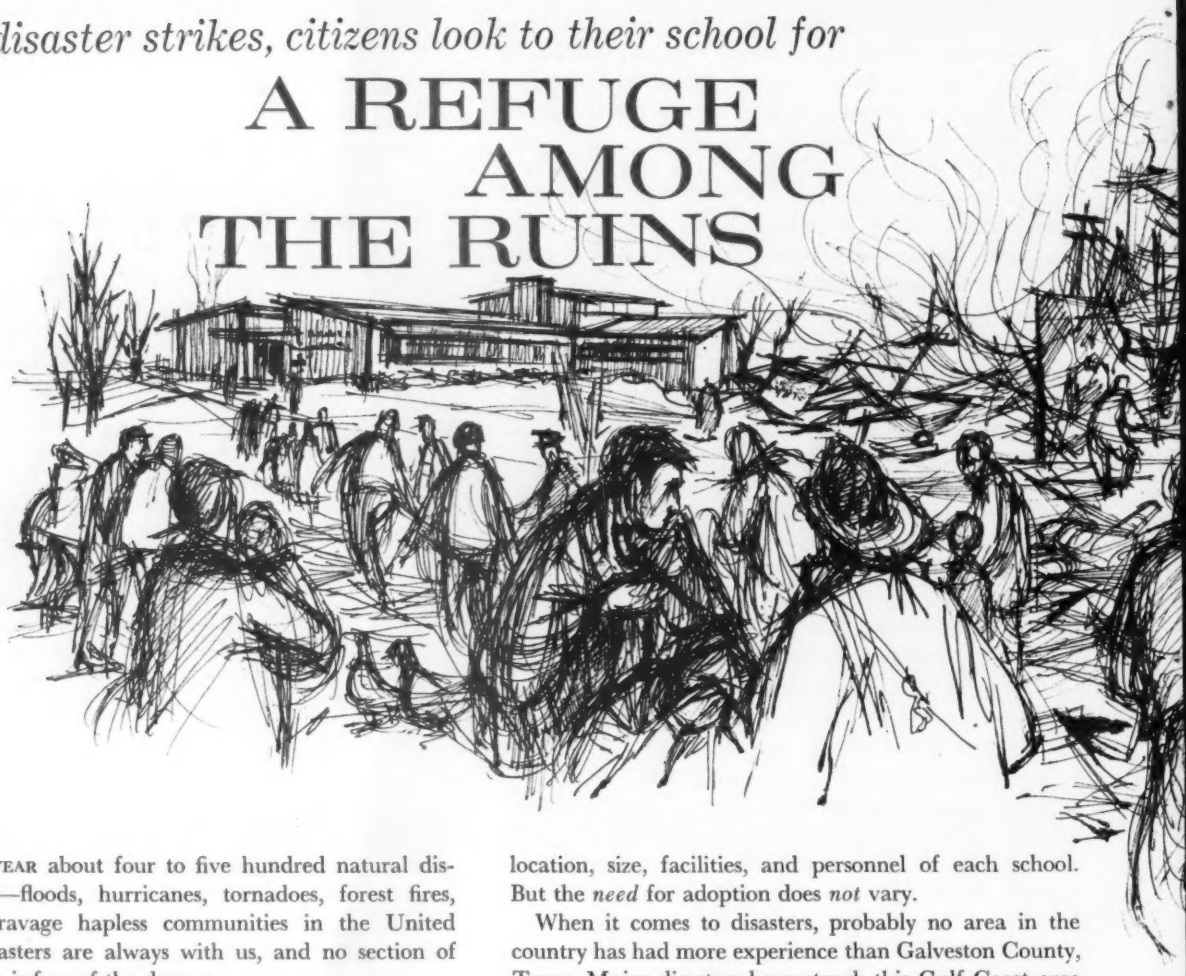
ARCHIBALD B. SHAW editor, OVERVIEW:
"The library in this air-conditioned school will forever be a far more comfortable place for children to sit and read because it is cooler and more bearable. I thought the same thing in the cafeteria. And this isn't just in the summer. I would say it would be unendurable for the number of children I saw in some of these rooms to be together in the same room without air conditioning. We have all been through the stage where the audio-visual people wanted us to build a classroom exclusively for a motion picture machine. We went through a stage where we shaped classrooms for maximum outdoor light. I'll be glad when we're through the stage of having to prove air conditioning and can include it as one of the standard major factors in a balanced learning environment."

John Lyon Reid



When disaster strikes, citizens look to their school for

A REFUGE AMONG THE RUINS



EVERY YEAR about four to five hundred natural disasters—floods, hurricanes, tornadoes, forest fires, blizzards—ravage hapless communities in the United States. Disasters are always with us, and no section of the country is free of the danger.

Schools are in a key position during a disaster. Robert Edson, national director of disaster services for the American Red Cross, told OVERVIEW, "Reports of any major disaster operation show that school facilities have been utilized to the fullest in mass shelter and feeding programs, and that school personnel, from administrators and principals to the custodial and kitchen staff, have worked hard and long."

Despite the recognized responsibility of schools, many administrators have done nothing about preparing for a disaster. A survey by the George Peabody College for Teachers reveals that few county or large city school systems have their own disaster-preparedness plans. Moreover, fewer than half the state departments of education bother with potential school disasters other than fire. Even in those states which have had tragic experience with tornadoes, earthquakes, or other disasters, schoolmen appear to believe, according to the Peabody report, that disaster planning is a problem for local government and not for the school.

That every educational institution should have a plan appears obvious. An abundance of literature on disaster plans is available from the U. S. Office of Education, the Office of Civil and Defense Mobilization, and the American Red Cross. Adoption of these plans will vary with the location, size, facilities, and personnel of each school. But the *need* for adoption does *not* vary.

When it comes to disasters, probably no area in the country has had more experience than Galveston County, Texas. Major disasters have struck this Gulf Coast area on the average of once every other year for the past fourteen years.

For many years, Galveston tradition dictated that publicly-owned buildings be opened during hurricane storm warnings so that citizens could find shelter. The City Hall, County Court House, and City Auditorium were used, although Red Cross surveys showed that feeding, medical-nursing, sleeping, and toilet facilities were inadequate in most of these buildings.

George K. Graeber, chairman of the Galveston County Red Cross Chapter, explains that "as time went on, more people began to go to the schools in disasters, having discovered from experience that school plumbing didn't break down, that a kitchen was available for preparing infant formulas, and that there was a place to get into a supine position—a body was not forced to sleep jackknifed across a row of uncompromising auditorium seats."

Over the years, discussions have been held between the Red Cross and district school superintendents throughout the county, and informal agreements have been reached, Graeber says. The Red Cross, however, sends a confirming letter to each superintendent to the effect that the Red Cross will be responsible for any loss or damage to the facilities.

These discussions and unwritten agreements have also

Marilyn Miller

resulted in Galveston's version of a "shelter management team" consisting of (1) a shelter manager (usually the school's principal) with "ultimate authority and responsibility" of the shelter operation; (2) a communicator to answer the phone and operate the two-way "citizens band" radio; (3) a driver with a vehicle built high enough to travel through three feet of water; (4) a registered nurse; (5) a cook in charge of the cafeteria; and (6) a policeman to patrol the building.

Graeber warns that the best laid plans can bog down over minor details, as they have in Galveston. "One problem which came up each time a school was to be used as a disaster shelter was simply how to get in—who had the key and the authority to unlock doors? This was solved easily enough by giving the responsibility to school principals and janitors."

In Los Angeles, top school officials have also worked closely with the Red Cross on the care of civilians in any disaster. Their plans were spelled out in a 1958 bulletin to all school principals and junior college directors. The bulletin states, "In case of emergency, a school may be used as a shelter area, feeding center, first-aid station, or holding hospital. It is our job as school people to see that all school facilities be made available to any officially designated agency."

A school administrator acts as chief of the school division in each of the thirty-five civil defense districts in Los Angeles. A school principal will coordinate the welfare center which serves as the administrative headquarters of the district's evacuation and shelter division. (One welfare center may service a dozen or more mass-care shelters.) School safety regulations also require that one-third of all teachers, one-fourth of all classified personnel, and all bus drivers have current Red Cross standard first-aid certificates.

The nature of the disaster most likely to occur in an area also affects the type of local disaster plan needed. In the Los Angeles area, forest fires are common. During a recent fire in the Malibu section only one school stayed open as a disaster shelter. In a five-day period, some 325 persons were fed and cared for, fifty of whom slept at the school. Such a localized disaster did not affect other schools, which operated as usual.

On the other hand, in Dade County (Miami), Florida, the most common type of local disaster is a hurricane. While Dade County schools have a disaster plan similar to the one in Los Angeles, some distinctions are noteworthy.

Officials select as shelters only those schools (or parts of a school) without large expanses of glass and with interior corridors. Also, instead of opening only one or two shelters, as in Los Angeles, all schools designated as shelters are opened in Dade County when a hurricane warning is issued.

Since no one can predict when disaster will strike, plans must be flexible enough to work even when schools are closed. For example, the Cedar River flooded Cedar Rapids, Iowa, for four days last spring when schools were closed for vacation. Nevertheless, two schools were used as mass shelters, and school personnel—principals, teachers, nurses, janitors, and cafeteria workers—volunteered for the emergency. This and other disaster experiences—notably in the Worcester, Mass. tornado of 1956—bear out the theory that school personnel prefer to cope with an emergency themselves rather than have "outsiders" come in to direct operations in "their school."

As President Kennedy said in his July 25 telecast, "We have another sober responsibility: to recognize the possibility of nuclear war in the missile age. Without our citizens knowing what they should do and where they should go if bombs begin to fall would be a failure of responsibility. . . . In event of attack, the lives of those families which are not hit in a nuclear blast and fire can still be saved, if they can be warned to take shelter, and if that shelter is available."

This is a real challenge to every educational executive. In most communities the shelter is available—it's the school. But it's up to school people working with other public officials to develop the *right* disaster plan for their own community.

When should the executive begin to develop a disaster plan? "The time to start," President Kennedy said, "is now." ●

Are we preparing young people to meet the changes in society?

by Harold H. Punke

RAPID AND PROFOUND changes within the American culture are creating difficult problems young people must solve today as they enter adulthood. This is easily demonstrated by the vast difference between the cultural climate in which young people mature today and the one in which their parents matured. Unfortunately, all aspects of our culture do not change at the same rate, nor does each have an equally important effect on youth. Therein lies the crux of the situation: some cultural areas develop rapidly, others slowly, at times even resisting change. In those areas directly influenced by technology—employment, transportation, diet, and recreation—change is relatively swift. But in long established institutions, such as the family, the school, and the community, gradual change is the rule. It is the widening gap between the rates of change in these areas that makes coming of age in America an increasingly complex experience.

Numerous investigations of problems concerning American youth have been made by public and private agencies. One fairly standard conclusion of these studies is to blame the family for much of the delinquency or other signs of maladjustment among young people. Schools and community organizations also reap an abundant harvest of criticism. While the family, the school, and the community are certainly open to criticism, it should be carefully conceived and logically presented. Too often such criticism disregards the factor of cultural change.

The family is not the same thing it was fifty or even thirty years ago. Consequently, it isn't able to assume responsibility in all the areas it once controlled. For example, the authority that parents once had over their children has diminished considerably. Young people have more freedom than they did when they worked side by side with their parents in agriculture or other work that tended to keep the family together. The automobile, more spending money, and the lure of big city jobs are largely responsible for this splitting up of the family.

The widening gap between their physical and social maturity is another serious problem that young people must cope with. Tremendous strides have been taken during the past two generations in drugs, vaccines, nutrition, hygiene, and child care. As a result, more children are reaching physical maturity at an earlier age. (It is a rare youth who doesn't look down on his father in his late teens—literally if not figuratively.)

The Young Marrieds

But persistent misconceptions about what is good for youth are limiting the ways in which they can make use of their energies. Parents, teachers, and other members of older generations are still strongly influenced by rules of morality and behavior that were loudly proclaimed

(if often violated) during their own adolescence and early adulthood. Yet many of them rail about immorality among high school students and loudly condemn the trend toward earlier marriage.

Actually, it might be wise if we began to encourage early marriages, thus destroying the shibboleth that marriage must be postponed until the economic responsibilities of parenthood can be handled by the marriage partners alone. This would involve a fundamental change in the current attitude of parents about their economic responsibility to children who want to get married before they are financially independent. Partial subsidy by parents would help provide financial security for those who marry in their late teens and early twenties, especially when they are still in school or college. Government could help through income tax concessions, scholarships, medical aid, and vocational counseling. And high school programs could be adjusted to help youth attain a more realistic view of the satisfactions and responsibilities of family life.

Finding and keeping a good job is perhaps the most serious challenge faced by today's youth. As the effects of automation are increasingly felt, getting a job they want is becoming extremely difficult for many young people. Until recently, persons entering the labor force had a relatively static choice of vocations. But with present rapid changes in production and distribution methods and the shrinking market for unskilled workers, both industry and prospective job holders must plan carefully for the future.

Employment Planning

Another question is the degree to which industry should be expected to assume responsibility for developing new jobs and greater employee efficiency. Well into the twentieth century, America's economic growth was directed almost solely by industry, with little interference from government. In fact, Congress and the Supreme Court took great pains to allow industry freedom of action. Unfortunately, many industrial leaders developed a pernicious indifference to good economic planning except when "good" meant higher company profits.

But as our culture has become more complex and our international involvements more widespread, government has had to assume greater responsibility in domestic and foreign affairs. Since this trend is expected to continue, government's role in directing the nation's future must be more clearly recognized and more courageously carried out.

This might involve the subsidy of certain areas of industry for specific contributions toward preparing youth for various jobs. Such action has precedent in government subsidy of research and contracting for defense goods. This would not work to suppress our system of free enterprise; rather, by encouraging full development of our human resources it would help insure America's future economic health.

Dr. Punke, professor of education at Auburn University in Alabama, is a frequent contributor to education journals.

Government and industry should also pay closer attention to personnel development. For example, some firms are piling up most of their sales today from products that did not exist ten years ago. For such companies, the grooming of a creative research and development staff may be more important than their big sales items of the moment. Labeled by the financial world as growth companies, these firms owe much of their success to orientation toward the future, through anticipating what goods will be needed, how they should be made, and how well they can be expected to sell.

Voting Age: 18

Besides providing jobs for youth, steps must be taken to develop their social awareness and maturity sooner by allowing them to take part in civic responsibilities while they are still in their teens. Young people marry and raise families, fight and die in war, and pay income taxes before they are old enough to vote. Why, then, shouldn't the national voting age be lowered to eighteen? This would give youth an opportunity to participate in the shaping of the nation commensurate to their legal obligations for its welfare.

It would also lead youth to a better understanding of social regulations and government procedures and would enable them to share with their elders the power, under our democratic system, to change or eliminate unwanted laws. Thus they would face sooner and more directly the responsibilities of helping to develop and maintain programs affecting their future welfare.

Conservative elements can be expected to resist efforts to lower the voting age. They emphasize the fickleness and irresponsibility of some youth groups (often unrepresentative), but ignore how present social structures militate toward keeping them fickle and irresponsible.

However, programs that seek to change outdated social values will be ineffective unless imagination is generated to put them into effect. Much of the education needed to change these values is the responsibility of the schools.

Better and bolder education programs, including, especially, development of curriculums that are in step with the needs of modern society, must be provided with all deliberate speed. Social science is probably the field that can contribute most in giving youth a deeper understanding of the social implications of subjects they study.

An attack on the problems of youth requires painstaking analysis of conditions, careful organization of effort, and concerted action by leaders and followers. It demands a revised concept of the family and its areas of responsibility, a reappraisal of the role of industry regarding its handling of the goods it produces and the workers it hires, and a reëxamination of the responsibilities of government in the development of American culture.

In America's youth lies the hope and the foundation of the future. As Henry David Thoreau wrote in *Walden:* "The youth gets together his material to build a bridge to the moon, or . . . a palace or temple on earth. . . . The middle-aged man concludes to build a woodshed with them." ●

Designing for Custodians

MANY SCHOOLS are designed today for the comfort and convenience of everyone except the people who maintain and operate them. Classrooms are ventilated or air-conditioned, corridors are noise-cushioned, and teachers rooms are graciously appointed. But the custodian's quarters are often no more than an airless nook in the basement.

In planning school facilities, attention should be focused on two points important to maintenance and operations personnel: (1) their health, safety, and morale; and (2) the tasks they must perform. At present, both are too often overlooked by architects and educators. "Left-over" space in the boiler room, for example, is frequently converted into a makeshift room for plant and custodial workers.

Planning proper facilities for custodial staff does not necessarily lead to higher costs. With reasonable care on the part of architects and educators, the planning can be carried out at little added expense and with very worthwhile results in terms of efficiency and morale.

Industry and business long ago discovered that careful attention to the morale and general welfare of workers paid off handsomely in greater productivity and better workmanship. Such experience indicates that school planners should reflect similar awareness in their designs. The amount and type of space provided for plant and custodial workers will vary from school to school, depending on the size and capacity of buildings. But recognition that building design should meet the needs of these workers is important to any school.

There are several important provisions to keep in mind when planning facilities for these workers. Regardless of size, room organization, or the equipment housed, every school should be designed to provide custodial workers with:

1. Toilets, lavatories, and showers of their own.
2. Locker rooms with storage space for several changes of uniforms and for outer clothing.
3. A well-stocked and easily accessible first-aid cabinet.
4. Convenient means to communicate with places outside the school.
5. A comfortable and attractive area in which to eat and relax.

How these provisions are met is limited only by funds and the ingenuity of school planners. It may be possible to provide some of these facilities in spaces used for other purposes, but this practice of doubling up should not be overworked.

Special effort should be devoted to designing and equipping a building for maximum safety for everyone using it, especially plant and custodial people, who must perform a wide variety of tasks and use many different pieces of equipment. Particular attention should be given to safe location of high-voltage boxes, lighting in dark crawl spaces, color codes to identify critical valves and hot equipment, and non-slip floor covering where appropriate.

Work and storage spaces should be designed for their special functions. Experience suggests that every well-designed school should provide:

1. Space for an operations center that includes storage for records.
2. Space to store all equipment and supplies.
3. Space for receiving, checking, and temporary storage of academic materials and equipment delivered to the school.
4. A workshop equipped to handle a variety of maintenance tasks.
5. An area for conferences, in-service training, activi-

Photo courtesy White Mop Wringer

The boiler room is a work area, but for many custodians it is also a lounge and lunchroom, the result of poor planning.

By Basil Castaldi, associate professor of education at the University of Illinois, Urbana.

Maintenance (continued)

ties, and storage of reference materials—perhaps combined with the dining and rest area.

Setting aside space for an operations center and record storage is particularly important. An operations center gives the person in charge of maintenance and operations a central point from which he can more easily control the activities of his workers. It also provides a place from which teachers, principal, and superintendent can quickly reach plant and custodial workers. Through effective use of his readily available records, a resourceful head custodian could conceivably save a school system a great deal of money.

Equipment and supplies should be stored as closely as possible to point of use. This means that storage closets should be placed in strategic locations, such as near the cafeteria or auditorium. Ample space should also be set aside for bulk materials and equipment.

Space for receiving, checking, and storage of academic materials and equipment is essential because much of it is delivered when school is not in session. Once checked and safely stored the goods are quickly and easily available to teachers.

A well-equipped workshop is the hallmark of an efficient maintenance system. Even if the school system is large enough to have a central maintenance shop for major repairs, every school needs at least a small shop to handle minor work.

Finally, it is most important that workers have the opportunity and encouragement to improve their skills and understanding of everything pertaining to the maintenance and operation of the plant. Therefore, an area should be set aside for training and conferences. Frequently this area can be combined with the dining and rest area, and can also be used for showing films about school maintenance and operation. These activities unquestionably upgrade efficiency and performance and develop greater pride in their work among plant and custodial personnel. ●

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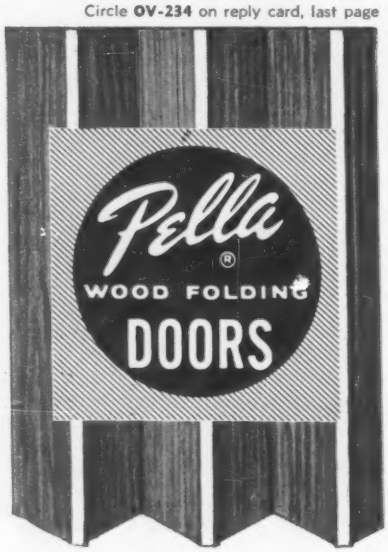

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New Trends in Administration

DURING THE 1950's, educational administration earned its badge as a learned profession. Before then, administration courses were usually offered by a successful principal or superintendent who described techniques that "worked" for him. But this passing along of pragmatic advice didn't do much to advance educational administration as an academic discipline.

Then during the early 1950's, those concerned with administrator training turned their attention to the principles of administration and to an analysis of the nature of the administrative process. This new trend grew out of the realization that much could be derived from the fields of business and government (which saw educators quoting the works of Gayol, Follett, Barnard, Taylor, Urwick, and Gulickete) and led to the formation of centers of administrative thought, such as the National Conference of Professors of Educational Administration and the Kellogg Foundation-supported Cooperative Program in Educational Administration.

This trend is now leading to a theoretical consideration of the foundations of administration in our universities. This doesn't deprecate the practical aspect of administration—it has its place, a necessary place, in administrative teaching. But the attempt to develop an administrative theory must be carried forward in order that the educational executive find himself competent in a *specific* situation because of his knowledge of the *general* factors underlying all such situations.

Principals and superintendents thus trained in the principles of administration acquire a method of operation which they can apply, with modification, to any system they are hired to administer.

Admitting that we must concern ourselves with administrative theory, should we focus on *educational* administration or on administration in general? The former has been designated "adjectival" administration and the latter the "body of administrative thought." It is our belief that administrators, embryo administrators, and teachers of administration should pursue the latter. He who is trained in Administration rather than Administering the High School (the Junior College, etc.) will contribute far more to a school system because he is able to develop a theory, a frame of reference, into which all formerly disjointed studies in the social sciences may be fitted.

This demands a familiarity with the language of the new trend and it is in this area that theorists are now concentrating. The difficulty involved in the expression of administrative principles is that the terms are not yet sufficiently restricted—in the sense that a professional language must be restrictive to express its abstractions. There is as yet no common denominator of terms, no universal acceptance of definitions. Here are some of the terms (with their various meanings or implications) one finds in the recent writings of administrative thinkers:

Authority—Is it derived from the individual, from the position, or from coordination between position and subordinates?

Leadership—Is it based on the degree of creativity shown? Should it be combined with high technological competence? What about sheer common sense?

Theory—Would we agree with Webster that it is "speculation," or with the theorists who explain it as assumptions leading to empirical laws? Our choice is important because it pinpoints the dichotomy between theory and practice.

Communication—What is to be

By John F. Travers, professor of education, Boston College, Chestnut Hill, Mass.

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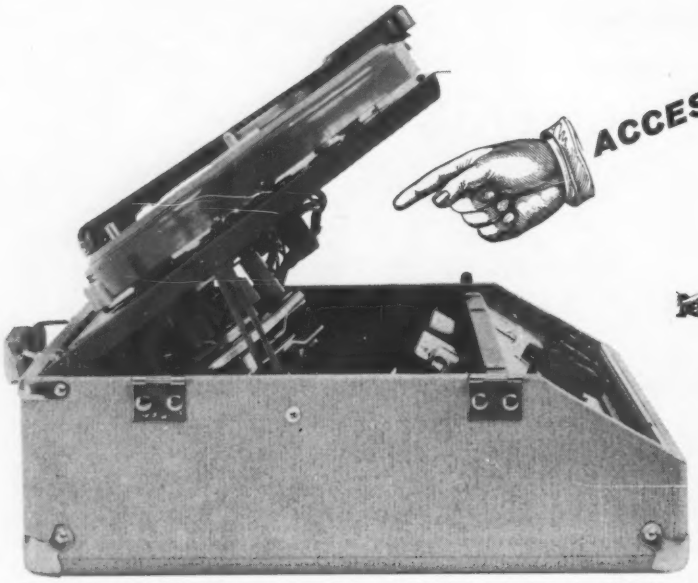

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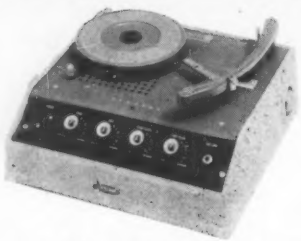
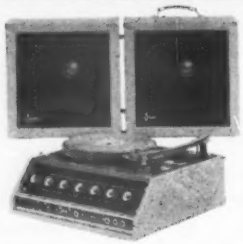


Newcomb Model R-164V portable combination transcription player/public address system has a 10 watt Bi-Coupled output system and a 12" round, dual-cone high fidelity loudspeaker, slanted and lighted operating panel with mixing controls and tone controls, 4-speed, variable-speed motor. Deck lifts for servicing. A tremendous value.



Newcomb Model TR-1656M-HF2 combines portability with exceptional coverage and high quality sound. This monophonic transcription player/p. a. system includes a GE variable reluctance magnetic cartridge, 56 watts peak Bi-Coupled output system, two two-way speaker systems. In addition to hinged deck, TR Series players have removable vent plate in bottom for under-chassis servicing.

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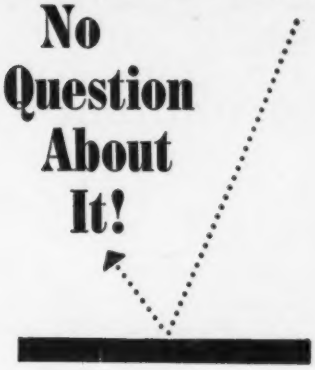

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New Trends (continued)

communicated and how? How rigidly should channels of communication be followed?

Decision-making—Who is to make what decisions? Has the organization been structured so that problems arrive at the highest level with prior decisions already made?

Organization—How formal should the structure be? As rigid as possible to eliminate the need of frequent decision-making, or flexible to meet sudden changes?

Cooperation—How much cooperation is necessary, and between what levels? At what point should it give way to the exercise of authority?

Principles—Should "principle" be thought of as a fundamental law, thus implying that a distinct administrative structure may function regardless of the nature of the organization? Or is the principle *derived from* the nature of the organization? This forces us to consider administration as either "adjectival" or "the body of administrative thought."

Creativity—An extremely important term that is causing much difficulty today, particularly in designating the source of creativity. In this organization age creativity is often forced to give way to collectivism. We forget that the organization came into being because of the ingenuity of individuals. Thus, decision making, particularly at high levels, must be an individual thing. The group or committee should advise only, not decide; collective decisions reflect too much compromise to be creative.

There are obvious weaknesses yet in the professional vocabulary of administration. There is need for a common denominator of terms, but we cannot yet formulate precise definitions until there has been more empirical investigation into the functioning of the individual in an organization. Thus, what is desirable in definition is a *combination* of the theoretical and the practical. And this reflects the new trend in educational administration itself: that administrators understand the theoretical in order that they may more effectively utilize the practical. ●

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Are you ready to welcome them?

PTA meeting tomorrow night? A civic group next week? School Board? Visiting lecturers?

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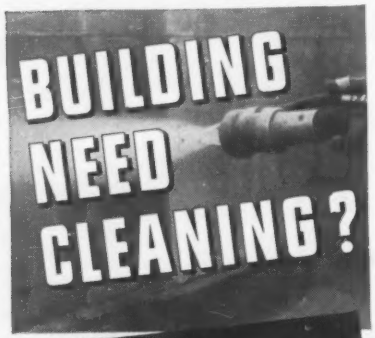

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Data Processing for A Booming Enrollment

SETTING UP a data-processing system for grade reporting and school record compiling takes time to plan, but once established, the system can handle a wide variety of administrative tasks quickly and efficiently.

We hit upon data processing as a solution to record keeping problems at Bishop England High School a year ago when our enrollment topped 700. For years the school secretary had spent many days preparing report cards for each six-week marking period. But as our enrollment boomed, it became an impossible task for one person and homeroom teachers were asked to help out. They spent hours gathering grades and figuring averages in a losing battle to beat report-card deadlines.

In June, 1960, we decided to investigate electronic data processing and contacted the Service Bureau Corporation, a subsidiary of IBM. It was almost September before we had accumulated all the data needed to start processing in time for the October marking period. But working closely with SBC personnel, we were able to decide what had to be done.

Most schools using data processing have special punch cards made to order on which teachers imprint grades with an electrographic pencil. However, with time running out, our SBC production manager decided to use low-cost standard punch cards on which our teachers simply write student grades. Later, these grades are key-punched into the cards before they are processed and the grades are printed on report cards.

Our next move was to have a report card designed to fit our needs. We have three marking periods each semester and wanted a cumulative report that would show grades for an entire year. We decided on a five-copy report form: one copy for parents, one for pastors, one for guidance counselors, and one each for seniors and freshmen (the seniors' cards are sent to the colleges which want to know what subjects their applicants are studying; freshmen's cards are sent to the elementary school they attended). We bought 10,000 of the five-part reports—a two-year supply—for $400. Under our present enrollment this averages out to about twenty-five cents per pupil annually.

Next we set up a schedule of things still to be done and found so much work we hadn't figured on, we almost cancelled the operation. The work we had to do next involved many hours of labor by many people to get the necessary information into proper form for processing. Here are the steps we went through:

1. Each subject was assigned a code number, name, teacher, and class period number which were coded into the punch cards by SBC. Fifty copies of each subject card were made.

2. Information for a student master card was gathered on registration day. Each student filled out an index card showing name, mailing address, class, section, and parish code number.

3. With fifty subject cards for each subject and 700 student master cards, the next job was to assign subject cards to each student master card. Everyone helped out: students, teachers, secretaries. The office was a jumble of punch cards. But in just over a week the job was finished. Altogether we had about 4,000 cards.

Finally, the preparatory work was finished and would not have to be done again except for the normal turnover of classes from year to year. Each teacher now had a complete set of cards—one for each student in

By Rev. W. J. Croghan, rector of Bishop England High School, Charleston, S. C.

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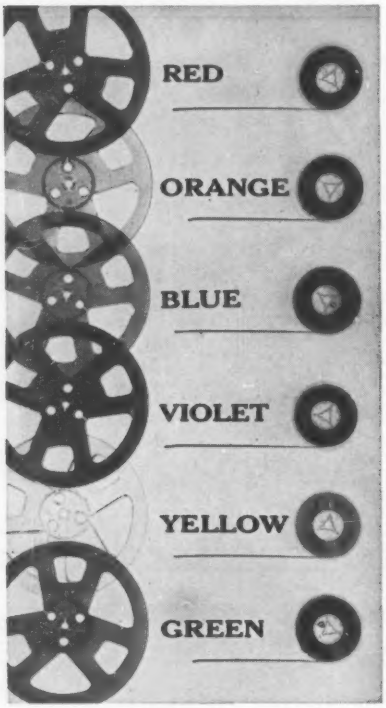

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Data Processing (continued)

her class. The teacher simply wrote the numerical grade and quality point total on each student's card. A duplicate card was used by the school secretary to mark tardiness and absence, and another by the disciplinarian.

When the time came to send out grades for the October marking period, the entire operation took just one day of combined effort at the Charleston SBC office and at the school.

The punched card system can do many other school administration tasks. It can prepare student schedules, homeroom and class lists, mailing lists, a master student body roster, and statistical reports. Almost any analysis of students and curriculum can be done in a matter of minutes. As time goes on, we expect to discover many more ways to use our data-processing system. We are already planning two changes in our present setup. Instead of compiling a list of failures according to teachers and class periods, we feel that a complete listing of teachers' grades for each class would be better. In addition, we are going to compile a list of the top two students in each grade section. Special credit will be given to these students even when they do not have sufficient quality points for the honor roll. Also, many parents want to know how their children rank in their grade section, so this year we are adding this information.

Though we are very satisfied with our data-processing system, it does have to be controlled carefully. Someone representing the school has to know what the school needs and expects; he has to stay on top of the job. This means plenty of work for whoever takes care of the data.

We feel that the service is well worth its cost. We paid an initial setup charge of $125 and we pay twenty-five cents per student per grade report. Altogether the cost of the first year's operation was about $1,300—less than $2 per student. For this money we have a time-saving, neat, versatile, and practically error-free grade reporting system. It's well worth the price. ●

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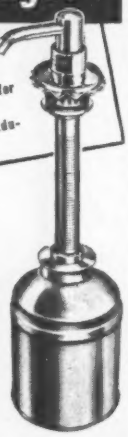

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Avoiding the Double Session

MANY EDUCATIONAL administrators, laboring under pressure of this year's heavier-than-ever enrollment, may be facing the bleak prospect of setting up double sessions. But there are several alternatives that should be considered first to cope with student overload until new classrooms can be readied for them.

Alternate-day attendance can be used instead of double sessions to relieve extensive overcrowding. Under the alternate-day plan, half of a student body is in attendance one day, half the next, with the extra time needed to complete a year of instruction provided through a longer school day or year. Alternate attendance appears to have the best potential for an area where mass overcrowding makes double sessions impractical.

When enrollment is no more than 25 percent above normal, there are several ways classroom space can be stretched to avoid double sessions. Here are five of the most effective methods.

1. Loading every class to capacity. This means small classes must be discontinued or built up to full strength.

2. Have some teachers carry their regular student load in fewer classes. For example, English and history teachers can usually handle their student load in four, instead of the customary five, classes. Thus one classroom is freed for every five teachers who compress their student load. This increases the capacity of the school, just as if a new classroom had been built.

3. Combine certain classes. When a school is large enough to have two or three typing classes, two of them can often be combined to meet in an area such as the cafeteria or study hall. To ease the burden of teaching a large number of students, two teachers would work together as a team.

4. Limit student course loads. Student schedules can be held to a maximum of five classes. This handicaps superior students and students who want to make up for a failed course by scheduling an extra one. But when conditions warrant, it can help ease the burden of excess enrollment.

5. Eliminate certain uses of classroom space. For example, students can be given the run of the campus, college style, during their study hall periods. While this frees the study hall for classroom use, it creates the problem of supervising the students who are free to roam.

Many educators are bound to express concern about possible harmful effects on teaching and learning that these extra large classes might create. However, experiments have shown that high school classes of one hundred or more students can be very successful.

Today, large classes are being used regularly in several high schools. In Charlotte, Michigan, for example, government and first-year algebra is taught to classes of more than one hundred students. Clark Muma, Charlotte's superintendent of schools, says that the large classes have "proved better in every respect than regular size classes," adding that "slow learners and superior students seem to do better work in the large classes." He attributes the higher achievement to the use of team teaching. "One teacher spends all his time presenting course materials while two others circulate through the class answering questions and giving additional help," Muma says.

The methods outlined have been used successfully in several school systems to delay double sessions, but they are not final solutions for excess enrollment problems. Used properly, however, these methods can postpone double sessions until obviated by the availability of new classrooms. ●

By Matt O. Hanhila, principal of Carl Hayden High School in Phoenix, Ariz.

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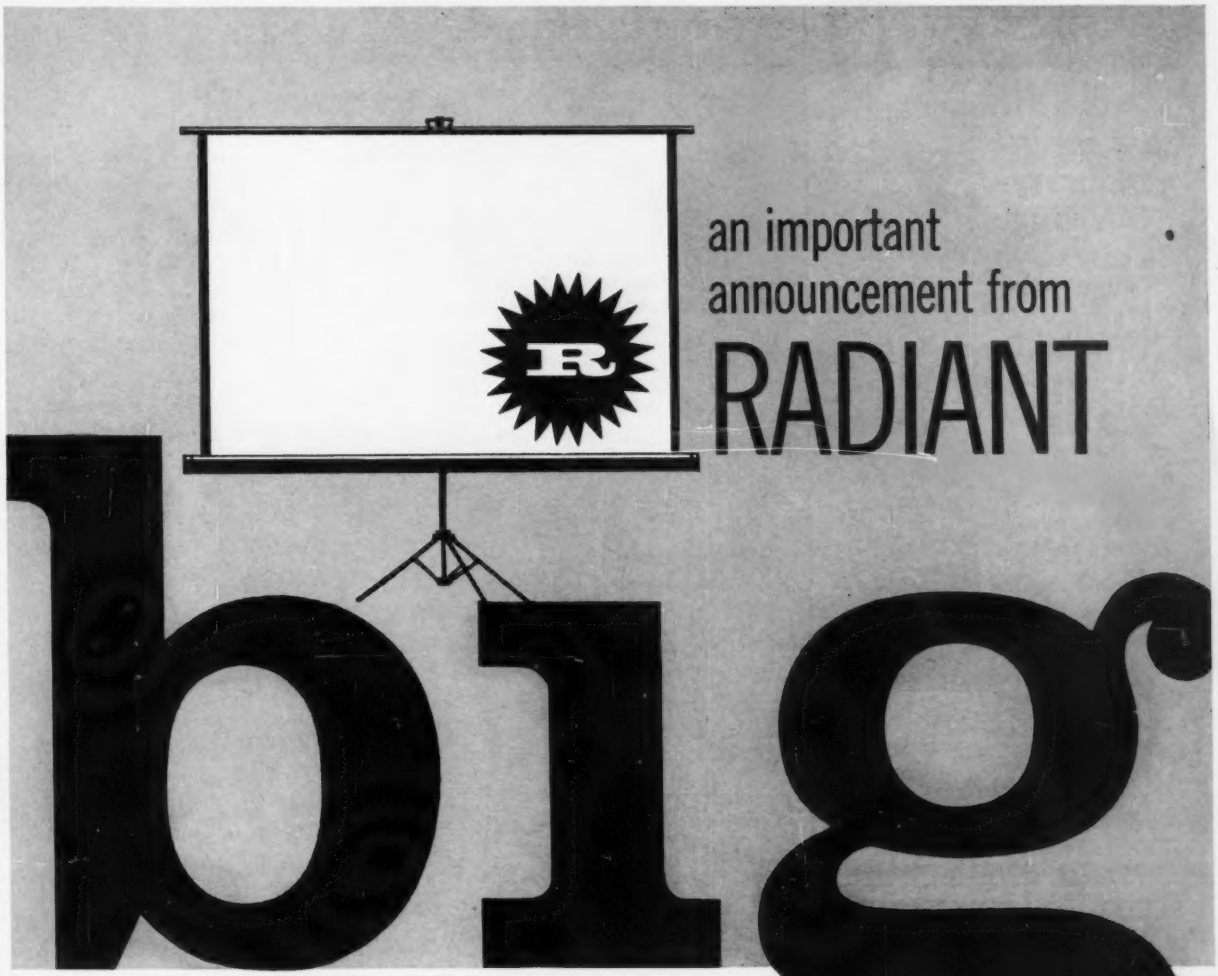

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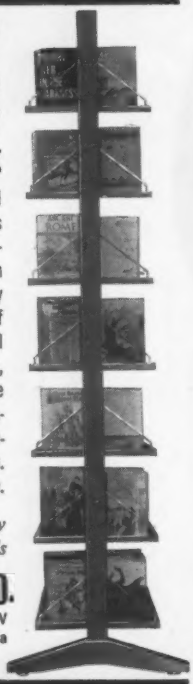

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EXECUTIVE'S BOOKSHELF

EDUCATION FOR COLLEGE: Improving the High School Curriculum

By Albert R. Kitzhaber, Robert M. Gorrell, and Paul Roberts. New York: The Ronald Press Company. 195 pp. $3.50.

Superintendent Edwards invited the presidents of nine Oregon colleges and universities to make a concentrated study of subject matter appropriate for college preparation. This book is the major portion of the report prepared by some fifty college subject specialists.

The process was cooperative and the book is entirely constructive. Conclusions and recommendations are deceptively modest, however. They rest squarely on the assumption that "the high schools should have as their central aim the imparting of subject matters. . . . The attempt to look beyond these to more abstract goals—the teaching of democracy, critical thinking, social adjustment, virtue—does not work out in practice, however plausible in theory, and should be abandoned."

The various reports on subject matter areas, apparently made in great detail, are summarized in chapters on literature, English language and composition, speech, history, social studies, foreign languages, mathematics, science, art, and music.

The findings and recommendations probably represent as good and as complete a job as any school system is likely to be able to get. The process of visitation and consultation must have had great value to the school system and to the professor-consultants. Except for that value, any secondary school or system could accept this report as a superior set of recommendations *of their kind!*

School administrators owe it to themselves and to their students and teachers, to wrestle with the issues implied or explicit in this book. The twenty-page Chapter I presents as fairly as is possible the points of view of the administrator, the teacher, the parent, and the professor—written by professors.

This cannot be shrugged off. If only we were a one-class, one-culture society, or if we could have high schools which were committed to serve about the same population segment as in Fadiman's youth, or even if we could somehow deliver to the high school door youngsters whose value systems, cultural backgrounds, and motivations were appropriately and uniformly shaped, this book would be an entirely valid blueprint for high school education. But far as we fall short of our ideal of education for all American youth, we do still hold it shakily to our bosoms.

Undoubtedly the burden rests with those who hold this ideal to continue searching for ways to realize it. This report won't help, but it does challenge the fuzzy-minded. We commend it for thoughtful reading and discussion.

PHILOSOPHY AND THE AMERICAN SCHOOL

By Van Cleve Morris. Boston: Houghton Mifflin Company. 492 pp. $6.

We rarely review textbooks—and this clearly falls in that category. But ever since the splendid volume on Modern Philosophies and Education (NSSE Yearbook LIV) we have looked eagerly for a book which treated a number of philosophic schools of thought even-handedly and followed through their several implications for educational practice. Professor Morris of Rutgers has done just that.

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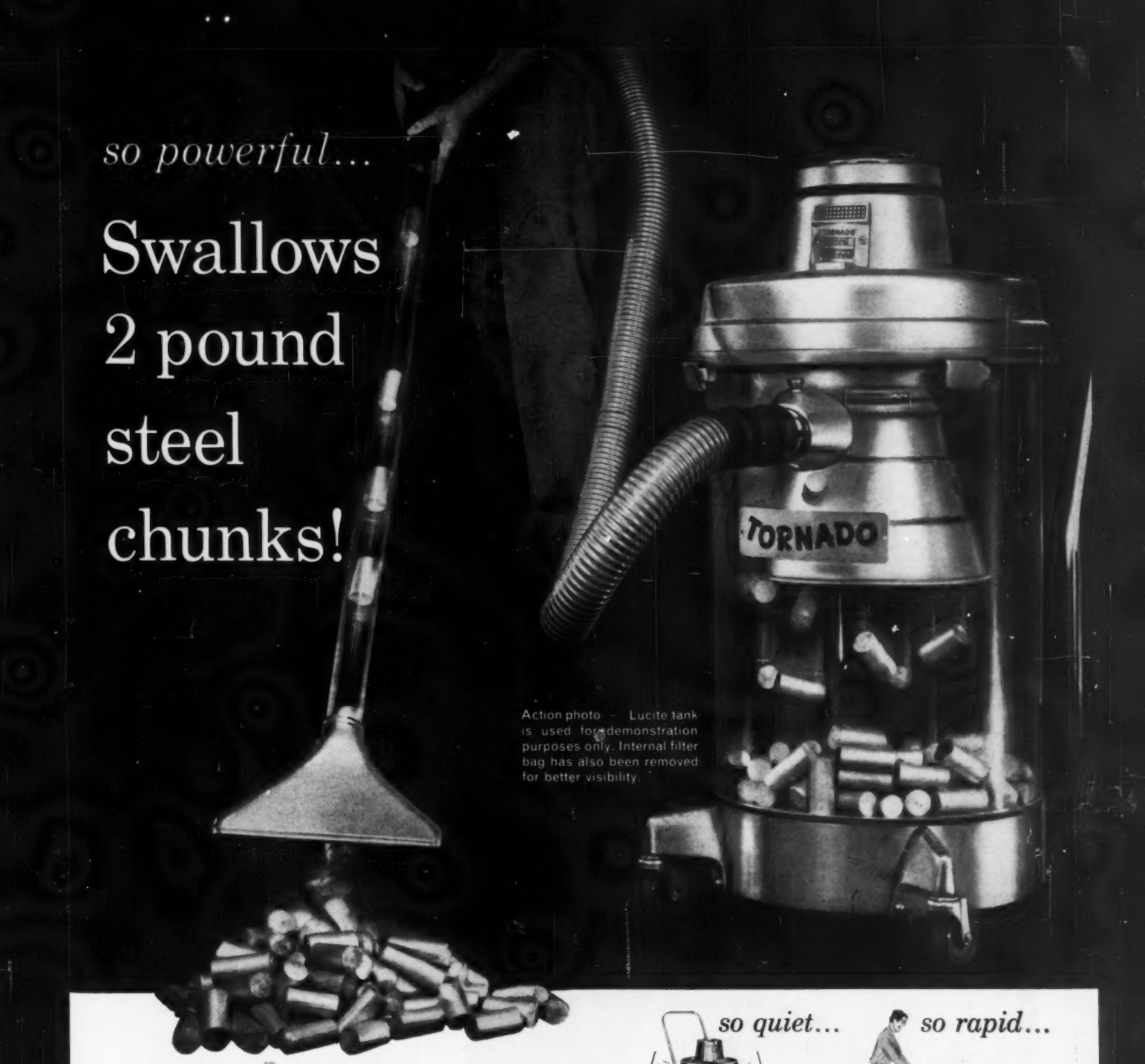

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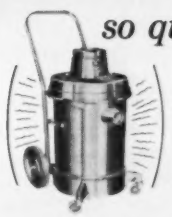

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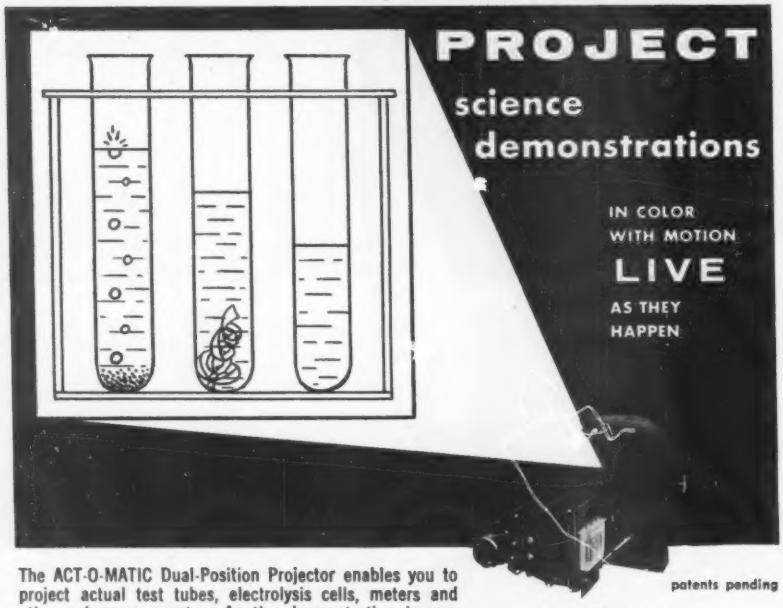

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Bookshelf (continued)

purposes but for reading by the thoughtful educationist. He takes five philosophical systems (Idealism, Realism, Neo-Thomism, Experimentalism, and Existentialism) as his core, but deals with the basic questions—What is real? What is true? What is good?—and relates each to the educative process.

Part V relates the five (and important variants like perennialism) to American education. But it is in Part VI that he finally relates philosophy to day-by-day class and school practice. This is a fascinating enterprise, and one which is bound to raise questions. Most helpfully it pushes the reader to the realization of the fuzzy eclecticism behind his own tendencies to thought and action.

Teachers of philosophy being what they are, we're not sanguine about wide adoption of this special "philosophy - to - policy - to - practice" approach. But we earnestly commend it to them from our position as "consumer." Equally we commend it to school people who recognize the stimulation of thoughtful reading.

THE CATHOLIC ELEMENTARY SCHOOL PRINCIPAL

By Sister M. Jerome Corcoran. Milwaukee, Wisc.: The Bruce Publishing Co. 479 pp. $6.50.

The Sister Principals of Catholic elementary schools are in a very special situation, since in a major sense the principalship cannot be said to be their careers. And although an increasing number of them are getting professional preparation it is still probably true that the typical principal must learn on the job.

Sister M. Jerome has made a magnificent contribution. This book was clearly written to meet their problems. Professor Treacy of Marquette puts a strong case for the call to educational leadership and in the closing chapter gives an unusually helpful guide to the principal's own study of her effectiveness. Professor Ward of Notre Dame sets out succinctly a whole series of principles to govern the conduct of the school—and relationship with children. Dr.

Theisen covers the school plant in a surprisingly comprehensive but compact chapter. The rest of the book is Sister M. Jerome's.

In content and presentation this is a thoroughly sound professional coverage of the total role of the Sister Principal. Diocesan superintendents and community supervisors will want to see that every principal has a copy. It would make a fine textbook, is readable with profit by old hands on the job, and will be an invaluable handbook for frequent reference.

GUIDEBOOK FOR SCHOOL PRINCIPALS

By Byron W. Hansford. New York: The Ronald Press Company. 296 pp. $5.

There's always room for a practical handbook for quick reference. Colorado's Commissioner Hansford gives well-founded practical answers to the 135 questions he found bothering most principals. The skillful use of references gives real substance to what might otherwise be merely glibness.

The range is excellent. He covers just about every aspect of school administration—from how to handle hallway petting to faculty morale. Good principals will not long be satisfied with the necessarily simple answers, but they do provide well-informed advice based on the author's long and close contact with principals and their day-to-day problems.

VALUES AND IDEALS OF AMERICAN YOUTH

Edited by Eli Ginzberg. New York: Columbia University Press. 338 pp. $6.

Editor Ginzberg is to be commended for this last publication of papers from the White House Conference on Children and Youth. This readable volume presents twenty-two of them—sorted into three categories: development and adaptability; problem areas; and values in transition.

It is very uneven reading—accounted for by the fact that six are survey papers and seven were reference papers while the others were addresses. They read that way!

Some are detailed summaries of

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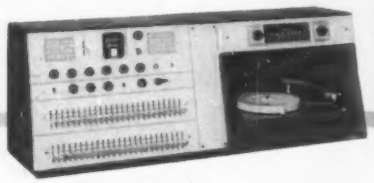

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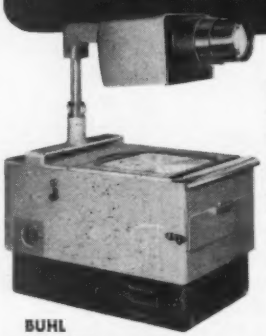

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facts (as Axt on higher education) or research (as Ehrmann on sexual mores). Others are wise commentaries, or calls to understanding or action. Reading of the first paragraph or two of any of the papers will be enough to invite a full reading or skipping.

We found most of the papers worth reading — some worth the most thoughtful attention. We can't know enough about adolescence, but some of the insights here will help.

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Modern Elementary School Science

By Willard J. Jacobson and Harold E. Tannenbaum. Bureau of Publications, Teachers College, Columbia University. 194 pp. $2.25.

The First Book of Teaching Machines

By Sam and Beryl Epstein. New York: Franklin Watts, Inc. 50 pp. $1.95.

New Teaching Aids For the American Classroom

Institute for Communication Research, Stanford University, Stanford, Calif. 173 pp. $1.

Guides to Newer Educational Media

By Margaret I. Rufsvold and Carolyn Guss. Chicago, Ill.: American Library Association. 74 pp. $1.50.

The Influence of the Cinema on Children and Adolescents

UNESCO. International Documents Service, Columbia University Press.

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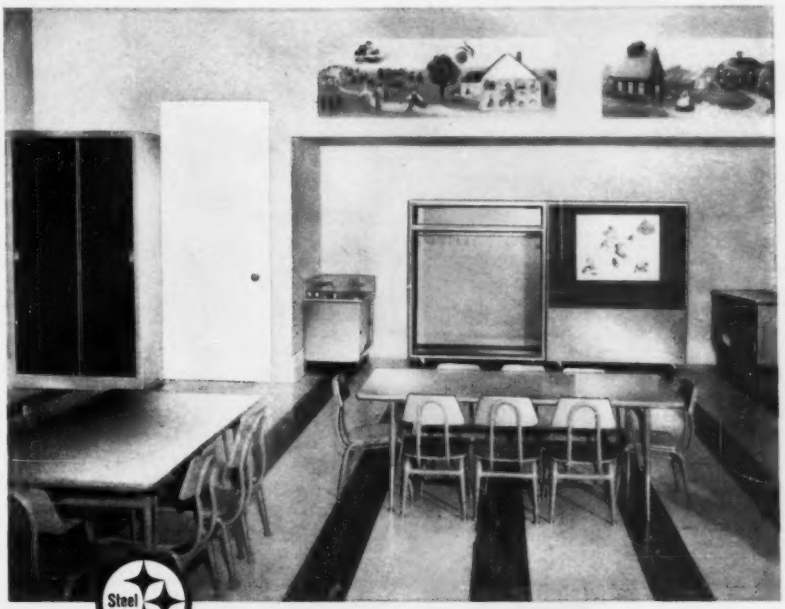

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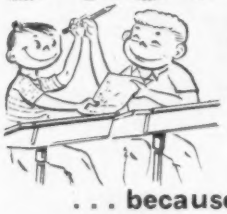

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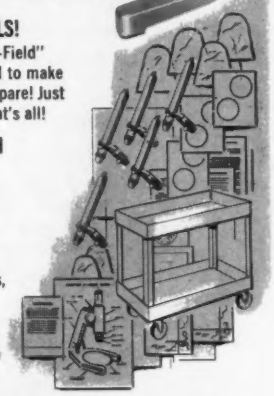

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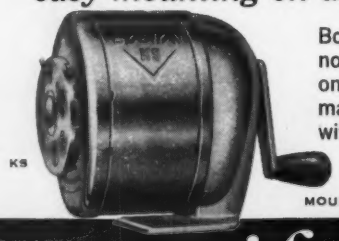

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Frontiers of Elementary Education VII

Edited by Vincent J. Glennon. Syracuse, N.Y.: Syracuse University Press.

Frontiers of Secondary Education V

Edited by Paul M. Halverson. Syracuse, N.Y.: Syracuse University Press.

Faculty Handbooks in California Public Junior Colleges

By Frederick C. Kintzer. For sale by UCLA Student Store. $1.

The Junior High School We Need

By Jean D. Grambs, Clarence G. Noyce, Franklin Patterson, and John C. Robertson. Association for the Supervision and Curriculum Development-NEA, 1201 Sixteenth St., N.W., Washington 6, D.C. Free to all ASCD members.

Research and Reporting Activities in Legal Problems of Education

By M. A. McGhehey, U.S. Department of Health, Education, and Welfare, Office of Education, Washington, D.C.

Skill in Teaching, Assessed on the Criterion of Problem Solving

By Richard L. Turner and Nicholas A. Fattu. School of Education, Indiana University, Bloomington, Ind. Available at University Bookstore, $1.25.

Biological Education in American Secondary Schools 1890–1960

By Paul DeHart Hurd. American Institute of Biological Sciences, 2000 P St., N.W., Washington 6, D.C. 263 pp. $4.75.

Guiding Superior and Talented High School Students

By Frank S. Endicott. North Central Association's Project on Guidance and Motivation of Superior and Talented Students, 259 E. Erie St., Chicago 11, Ill.

Educating Gifted Children

Revised edition. By Robert F. DeHaan and Robert J. Havighurst. The University of Chicago Press. 362 pp. $5.

Predicting School Enrollments

By Roscoe C. Brown, Jr. The Center for School Services, School of Education, New York University. 49 pp. $1.50.

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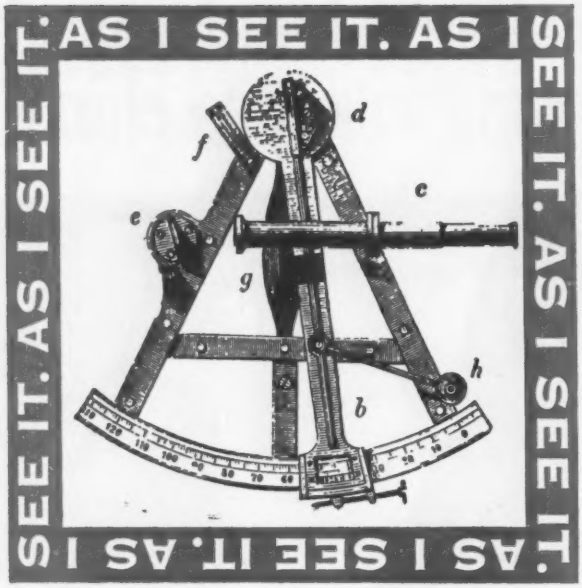

Controls Should Be Used —Not Feared

Walter D. Cocking comments on the current scene

IN ANY PARTNERSHIP there is concern about the roles each partner plays, and the influence each exerts. We are concerned with the amount and types of controls that local, state, and federal governments will exert in the developing programs of education in the United States.

If good partnership relations are to exist in education, it is important that good controls be established and that bad controls be avoided. Good controls provide for a well understood concept of the roles each partner will play; bad controls are those which give one partner undue influence in determining what is done.

One could find any number of bad controls in our schools now. I would list the following examples:

1. Requiring matching funds by state and federal government in order that other levels of government may qualify for participation. Such controls imply governmental superiority by imposing such controls over others. It is contrary to equality of partners and unnecessary, for it suggests a greater interest on the part of the governmental level imposing such a control than other levels possess.

2. Requiring approval by state or federal levels of a program established for a particular purpose. Approval of a state plan for participation in Smith Hughes programs, for example, is contrary to the principles of partnership.

3. Requiring school systems and states to follow a given plan or procedure in order to qualify for programs under the National Defense Education Act. It assumes superiority on the part of the Federal Government which is contrary to the best interests of good education.

4. Requiring a fixed time schedule, a set body of content, and a universal testing program for all students, frequently found at the local level and not unknown at the state level. Such controls deny individual differences and imply more wisdom than any control-maker could possibly possess.

Finally, I would suggest that those controls which interfere with individual rights (requirements of allegiance oaths invoked in various programs, rules for special conduct for participants, etc.) have no place in a partnership program and certainly have no place in a program of education designed to keep us free.

On the other hand, there are good controls which may be used. One of the most effective is communication in which all pertinent information regarding education shall flow continuously to people throughout the nation. It pays dividends in developing enlightened understanding of education and its problems. Public understanding is probably the most effective control a free society can use.

Closely related is the involvement of citizens in the consideration of educational policies and in the evaluation of results. Millions of citizens should constantly study education and its programs, locally, on a state basis, and from the national scene.

Strong programs of research and experimentation also offer examples of good controls. Research is concerned with facts and the results which come from various types of educational activity. Research tends to eliminate bias and prejudice and places high rewards upon results.

Also, as I see it, a partnership program of education by its very nature is a control system *per se*. In a partnership the whole enterprise is protected through the involvement of each of the partners. Good partner teamwork not only insures efficient operation, it protects against undue control by any one partner. To date, we haven't used such a control a great deal. It has much to recommend it.

America's destiny with respect to education is clear. A strong system of education must be provided and maintained. Controls must be used, not feared. ●

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EDUCATION ROUNDUP

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What's New?

As schools across the country opened for another academic year, the NEA asked large-district superintendents what innovations they planned. Here is a sampling from the replies:

Mount Vernon, N. Y. Space Age Curriculum Committee produced a booklet on the arithmetic of flying to show the use of arithmetic in space projects.

Bloomfield, N. J. is experimenting with teaching machines for the mentally retarded.

Union City, N. J. is using team teaching with emotionally-maladjusted youngsters.

Medford, Mass. is trying "team learning" in spelling and arithmetic.

Easton, Pa. has opened a new high school with separate wings for grades ten, eleven, and twelve, each with its own principal, guidance counselor, and clerical staff.

Mt. Lebanon, Pa. is using electronic computers to compile all permanent school records and is teaching algebra with a programmed text.

Alexandria, Va. is adding ten minutes to the high school day and dropping study halls. Each day consists of five 72-minute periods.

Lake Charles, La. offers selected high school sophomores a daily two-hour course correlating world history, literature, and art.

Midland, Tex. has developed a two-and-half-hour daily period of language arts and social studies for grades seven and eight.

Marion, Ohio is starting a five-year study of seniors to improve counseling, guidance, and curriculum planning.

Normandy, Mo. is sending high ranking seniors to nearby Missouri University Residence Center for advanced course work.

Davenport, Iowa is doubling English periods in grades 7 and 8 for more time on spelling and composition.

Sheboygan, Wis. is eliminating study halls in junior high and going to a seven-period day. Each teacher will have five periods for teaching, two for preparation.

Fall Enrollments

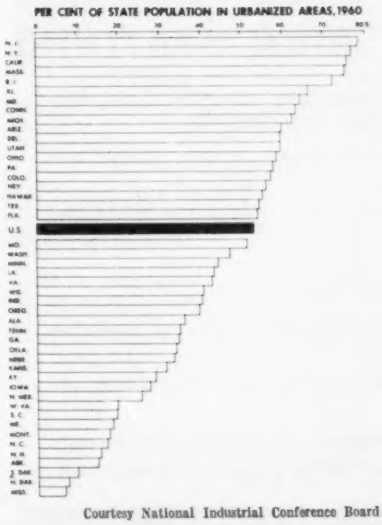
Enrollment in the nation's public and private schools from kindergarten through college, increasing for the seventeenth consecutive year, will reach a new all-time high of 49,300,000 in the 1961–62 academic year, the USOE reports, an increase of 1.4 million over last year.

The USOE also estimates that 1,684,000 classroom teachers will be needed by the public and nonpublic elementary and secondary schools—3 percent more than last year.

Anticipated enrollments in public and nonpublic schools from kindergarten through grade eight are estimated at 34.2 million, an increase of 400,000. In grades nine through twelve, the increase is expected to be 700,000—from 10.1 million to 10.8 million. In institutions of higher education, both public and private, an enrollment increase of 300,000—from 4 to 4.3 million—is anticipated.

Another report issued by the American Association of Collegiate Registrars and Admissions Officers predicts that when children born last year reach college age, higher education will face an enrollment of more than 9.2 million students. This would mean a student body more than twice the size accommodated in the nation's colleges and universities last year. For some states, the increase will be much greater—Nevada, for example, will nearly quadruple its college enrollment by 1978. And by that time, California colleges and universities are due for a whopping student body of 1,283,752. Author of the study is Dr. Ronald B. Thompson, Ohio State University.

Snapshot of Cities



Courtesy National Industrial Conference Board

Over half the U. S. population now resides in urbanized areas. Twenty states register more than 50 percent of their people in cities. Clustering trend of urban growth is paralleled by school redistricting.

Home (Mis)Rule

It was "a wonderful day for the children of New York City," according to Gov. Nelson Rockefeller. He was referring to the special four-hour session of the State Legislature that approved reorganizing the board of education in the nation's largest city (Sept OVERVIEW p23).

The legislation provides for a new method of selecting board members on a non-political basis and gives the board power to authorize the superintendent of schools to act in its behalf in most matters. However, subsequent bills, to be submitted at the regular session next year, are expected to detail the responsibilities of the board and superintendent.

While everybody concerned insisted that politics had nothing to do with the special session, most of the

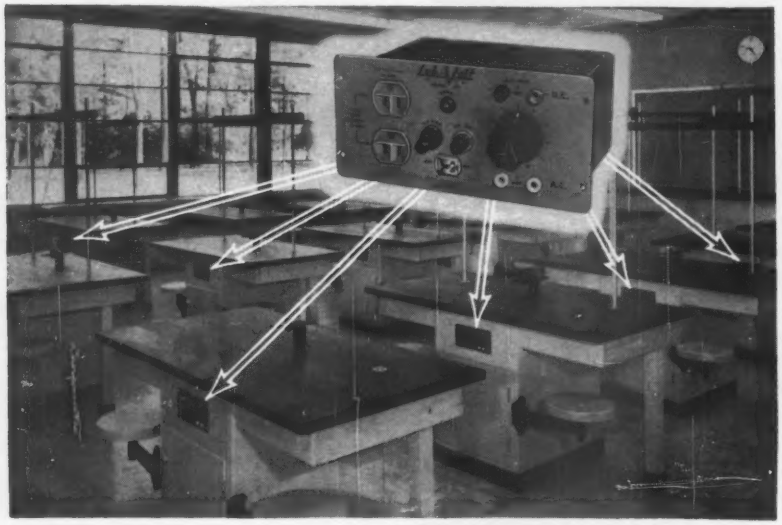
Roundup (continued)

oratory and maneuvering centered around New York City's hotly contested mayoralty campaign. Republican Gov. Rockefeller originally proposed to have the State Board of Regents appoint an interim board to run the city's schools. Democratic Mayor Robert Wagner charged that this would violate the principle of "home rule." The Governor saw that this charge might help Wagner in his bid for re-election and backed down. In addition, Rockefeller realized that such a charge might harm his own re-election campaign next year.

Instead of an interim board, the legislation stipulates that a panel of distinguished educators and civic leaders submit at least eighteen names from which the Mayor must appoint a new nine-member board.

State Education Commissioner James E. Allen (see *Close-up* p33), author of the reform program, says the expected results "will show that a big city can have a dynamic school system and one that we will no longer have to apologize for."

Circle **OV-276** on reply card, last page



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New Biology

The second phase of the new biology curriculum for high schools has begun. About 35,000 students are now using new teaching materials revised during the summer after last year's initial experiment with 15,000 pupils. After this year's experiments with three different texts and laboratory manuals, the final revisions will be made next summer and fall. Materials should be available for general use by the fall of 1963.

The new biology is being prepared by the Biological Sciences Curriculum Study of the American Institute of Biological Sciences under the direction of Dr. Arnold Grobman of the University of Colorado.

VHF Protest

The Joint Council on Educational Broadcasting, in an unprecedented action, has filed a petition in the U. S. Court of Appeals in the District of Columbia objecting to recent rulings of the Federal Communications Commission (Sept OVERVIEW p45). The Joint Council objects to the FCC decision to assign a third VHF television channel to commercial interests in Rochester, N. Y. and Johnstown, Pa. The JCEB wants these channels reserved for noncommercial educational organizations. In its petition, the JCEB maintains that "education has a right to more of these VHF channels." They take exception to the FCC policy of assigning UHF channels (14–83) to educational broadcasters.

Meanwhile, eleven colleges in five Texas cities have inaugurated a "closed-circuit microwave television network" to transmit eight courses to a combined enrollment of more than 35,000.

Windy City Drop-Outs

A Chicago civic committee has decided to do something about the teen-age drop-out. The committee, headed by Inland Steel Co.'s treasurer William H. Lowe, has launched

a study on the shortage of skilled workers in the face of an expanding labor force, the unemployment rate of non-high school graduates (twice that of graduates), and the expense to the community of supporting an unemployable drop-out (estimated at $30,000 from ages 16 to 56).

About 1,700 untrained Chicago teen-agers leave school each month. The committee hopes to "formulate guidelines for existing organizations working on the problems of education, training, and guidance of young people."

State Control

School districts are divorced from control by city or county building code requirements in Nevada, the state attorney general has ruled. The opinion was given in response to a query by Byron F. Stetler, state superintendent of public instruction, after the city attorney in Reno issued a memorandum that school construction in that city must comply with building code requirements.

The attorney general said that since school buildings are under close supervision of the State Education Department and the State Planning Board, this indicates that the "state has pre-empted any and all local regulations" in reference to school construction.

Shopping List

Turkeys, broiler-fryers, and lamb should be in abundant supply in October, according to the U. S. Department of Agriculture. There will be from 20 to 25 percent more turkeys marketed this fall than at the same time last year. In addition, cold storage holdings are up some 35 million pounds from last year.

Marketings for broiler-fryers should be up 7 to 10 percent over a year ago; cold storage holdings are about six million pounds above last year. January to June slaughter of lamb and mutton was 14 percent more than for the same period in 1960. Wholesale lamb prices have remained well under a year ago and will probably remain below last year through the winter.

Disturbia

Juvenile delinquency continues to increase in the U. S. particularly "among the children of the so-called white-collar classes," according to a Senate juvenile delinquency subcommittee report. The report told of "an alarming change in patterns" of juvenile delinquency since 1940. It said the number of cases in 1959 reached a record high of 773,000 involving 666,000 children of 10 to 17 years.

The report said "big cities are still by far the greatest producers of delinquents," but told of a 7 percent rise in youth delinquency in suburban areas and a 15 percent rise in rural areas in 1959.

"This trend to the suburbs in juvenile crime is a clear indication that the increase is largely among the children of the so-called white-collar classes," the report said.

"National and state police officials report that there are increasing occurrences of vandalism, muggings, burglaries, larcenies, and crowd disturbances emanating from the ranks of those who have no reason for committing these crimes except for so-called thrills," the subcommittee said.

A similar situation exists in England. A recent report by the Children's Department of the Home Office tells of an increase in juvenile crime for the three years following 1955. The provisional figures for 1960 indicate the increase is continuing and is reflected in nearly every age group of either sex.

Who Borrows?

Preliminary results of a USOE survey of students who have made National Defense Student Loans reveal that over half of the borrowers are preparing to teach in public schools or in colleges.

Other highlights of the survey:

- Nine out of ten borrowers said the loan determined whether they would start or continue their studies in college.
- Two out of five borrowers come from families with annual incomes of $4,000 or less; five out of seven

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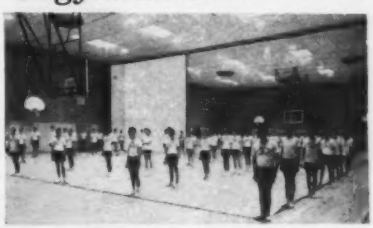

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come from families with incomes of $6,000 or less.

• Eight out of ten borrowers are financing at least half their college expenses; three out of ten are financing all of their expenses from loans, scholarships, and part-time work.

• Three out of five are men; one out of four men borrowers is married, while one out of ten women borrowers is married. Of the married borrowers, one in three has at least one child and one in twenty has four children or more.

Public Domain

Photostatic copies of information returns filed by tax-exempt foundations will be made more readily available by the Internal Revenue Service. By law, certain data listed by a foundation, such as its income, expenses, assets, and liabilities, are a matter of public record. But such returns have been open to inspection only in IRS offices, with no take-out copies allowed. Treasury Secretary Dillon now has approved a plan to mail photostats for a fee to people requesting public portions of the returns.

Curtain Raiser

"The large and expanded program of theater building" among high schools, colleges, universities, and community groups is providing the newest impact on the growth of drama in the United States, according to Norman Philbrick of Stanford University, president of the American Education Theater Association (June OVERVIEW p 44). While acknowledging the past and future contributions of the commercial theater, Philbrick told the twenty-fifth anniversary meeting of the AETA that the theater of Broadway "is losing its impact because the great plays, old and new, are not being given us."

"What is important is the fact that administrators of both town and gown are recognizing the necessity to promote the creative arts," Philbrick said. "More and more energy is being expended in the theater in every part of the United States. There is a ground swell, a passion for theatrical creativity evidenced everywhere."

Such new plants, he added, demand "a new understanding of what our national theater means. . . . We want to synthesize professionalism with the best efforts of all of us in the fascinating business of recreating the art which is always a living one."

Cloudy South

Southern colleges and universities have trouble hiring top-notch faculty members because of racial strife and a general hostility toward dissent and free inquiry, says Russell Middleton of Florida State University. In a paper prepared for the Congress of the American Sociological Association, Middleton reported on replies he received from 207 department chairmen from colleges and universities in ten southern states. Fifty-two percent of the chairmen said

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that racial problems already hamper their recruiting efforts. Many of those who do not now feel it's a problem expect it to be one in the future.

Fear of the impact of racial strife on faculty children is cited as the greatest deterrent. Middleton's study cites a survey by the American Association of University Professors "at one of the most highly respected universities in the South" as saying that 25 percent of the staff would leave if local public schools were closed.

Another factor is the fear that generally rigid attitudes in the South have limited academic freedom. Some chairmen reported that they "attempt to select people who are not controversialists."

The survey also covered 645 doctoral candidates at universities outside the South and fifty-one doctoral candidates in the South. The report said that doctoral candidates at southern graduate schools list employment in the South low on their table of preferences. Florida, Virginia, and North Carolina turned out to be relatively most acceptable. Candidates at southern universities tended to be even more hostile toward the Deep South than candidates at non-southern universities.

Faculties Integrate

Two Pennsylvania State Teachers Colleges—one at West Chester and the other at Lock Haven—have added a Negro to their faculties for the first time. Pennsylvania has fourteen teachers colleges. Thirteen of them have always had all-white faculties. The fourteenth, at Cheyney, has had an integrated faculty and a predominantly Negro student body.

Research Review

President Kennedy has ordered a review of the government practice of assigning research development and other scientific services to private organizations. The practice has been both criticized and defended in Congress in recent months.

When a government agency contracts for such services, the corporation selected—though often a nonprofit body—is not bound by government salary limits in paying its employees. Critics consider this practice a subterfuge to violate Civil Service restrictions. On the other hand, it is argued, the contract system attracts scientists and others who would not otherwise be available to the government.

More than 350 nonprofit corporations have been set up in the last ten years to perform government services, largely in the missile, electronics, and atomic fields. The Air Force has been their principal user. Recently, however, all the services have joined the trend toward buying services by contract. The Army recently severed a research relationship with Johns Hopkins University and is setting up a corporation comparable to the Rand Corporation (under contract to the Air Force).

Meanwhile, the Southern Regional Education Board announced that southern universities and medical schools devote approximately one-

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fourth of their total expenditures to medical research. In 1958, the last year for which figures are available, this amounted to a total of $18 million. The bulk of research funds spent in the South—about two-thirds of the total—comes from federal grants. The other third comes from private foundations and general funds, the SREB says.

Machine Age

Pro-Skinner and pro-Crowder factions set up shop at a two-day teaching machine conference sponsored by the American Management Association and demonstrated the kind of vitality sparking the programmed learning field (June OVERVIEW p 46).

Dr. Norman Crowder, developer of "branching" in programming, outlined his theory and its application to business and industrial training. Although Dr. B. F. Skinner was not present, several "linear" programmers carried his flag at spirited panel sessions. Dr. Arthur A. Lumsdaine, critic and historian of the programmed learning movement, suggested that future programs might well blend Skinner and Crowder techniques, closing the conference on a tenuous note of harmony.

The AMA, expecting 150 representatives of business, industry, and education to attend, was gratified when 600 descended upon its Hotel Astor headquarters. With this show of interest, the association plans to hold a similar conference on the West Coast later this year.

Machines and programs also held the spotlight at the huge (8,000 registrants; three hotels) American Psychological Association convention over the Labor Day weekend. Several dozen researchers from universities, public schools, industry, and the armed services ticked off the progress being made in program design, measurement, and productivity. Thirty-seven years ago, Dr. Sidney Pressey unveiled the first teaching machine at an APA convention. It gave candy for right answers.

Crisis Averted

The Idaho State Legislature, in special session, recently passed a bill permitting school districts to issue bonds for up to 15 percent of their assessed valuation. Earlier in its regular session, the Legislature passed a similar bill, later struck down by the State Supreme Court on technical grounds. This left in effect an old limit of 10 percent. The State Department of Education said eleven districts would face critical building situations within the next two years if they were not permitted to bond beyond the 10 percent limit.

Voluntary Supporters

Education received an estimated $1.3 billion (16 percent) of America's total philanthropy of $8.2 billion in 1960, according to the American Association of Fund-Raising Counsel, Inc. For the first time, education received the second largest share of

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all gifts. (The largest traditionally has gone to religion.) Higher education received more than 80 percent of the philanthropy directed to education.

Meanwhile, the Council for Financial Aid to Education announced that a study of sixty-four colleges and universities showed that they have averaged 106.3 percent more in annual voluntary support since 1956 than in 1954–55. Major private universities, private men's, women's, and coeducational colleges, and private professional and specialized schools showed gains of more than 100 percent. Only publicly-controlled institutions, state and municipal, failed to double their voluntary support during the 1955–60 span.

Visiting Scientists

Twenty University of Texas scientists will visit junior and senior high schools in that state during the 1961–62 academic year to bring students and teachers "up-to-date scientific knowledge." The scientists visit the schools for one to three days, serving as lecturers, demonstrators, career guidance constultants, and members of panel discussions.

School-to-School

"Schools of our country can make a genuine contribution to the development of mutual understanding with other nations," states Edward R. Murrow, director of the U. S. Information Agency. He called on educators to participate in a new school-to-school program with foreign countries through "the exchange of letters, scrapbooks, tapes, school newspapers and yearbooks, arts and crafts, and most desirable of all—exchange of students and teachers."

The USIA asked American embassies throughout the world to learn if foreign educators were interested in an exchange program. Murrow reports that the response was "most encouraging." In the past few months, he says, American high schools have established affiliations with schools in all parts of the world. "But hundreds of additional American partners are needed," he says.

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Audubon Case, Museum of Natural History, Cleveland, Ohio

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School administrators who would like to participate should contact the USIA's Office of Private Cooperation, Washington, D. C.

David L. Clark, cooperative research program director at the U. S. Office believes the most effective way to bring about changes in education is to have teachers visit other schools where change is going on.

At a University of Oregon research symposium, he proposed an educational extension service, similar to the extension service of the Department of Agriculture through which one farmer visits another who is trying something new.

Clark emphasized he did not believe the USOE should create a program which would detract from the leadership functions of the state educational agencies and local school districts. Rather, it should provide funds to state agencies for regional and statewide experimental education centers.

Stopgap

An "emergency" plan for a $17 million construction program has been sent to the Arkansas State Legislative Council by the presidents of Arkansas' state institutions of higher education. This move followed earlier rejection by the electorate of a $60 million construction bond issue, also led by the educators.

Cordial Hosts

Foreign students fare well in the United States despite some weaknesses in college and university programs, according to the first comprehensive nationwide study of foreign student advising in the U. S. Homer Higbee of Michigan State University, who conducted the survey, said that U. S. colleges and universities provide more services to foreign students than do similar institutions in any other country. The Soviet Union has created special facilities and institutions for foreign students, but Higbee noted that only some 9,000 foreign students were in Russia compared to 44,536 in the U. S. in the 1960–61 academic year.

Higbee said, "There is urgent need for the establishment of additional English language centers in the U.S." He reported that many advisors and their supervisors lack clear decision about the treatment of foreign students, but "not one president interviewed failed to indicate his concern about the foreign students' language deficiencies."

University officials reported many foreign students entering without enough money. Once enrolled, it is difficult to ask them to leave.

Another report to the U. S. State Department warned that $400,000 may be needed for many of the 1,800 Africans now enrolled in American colleges. The report also predicts an additional $100,000 may be needed to help about 1,000 new arrivals.

Philip H. Coombs, assistant secretary of state for the Bureau of Educational and Cultural Affairs said

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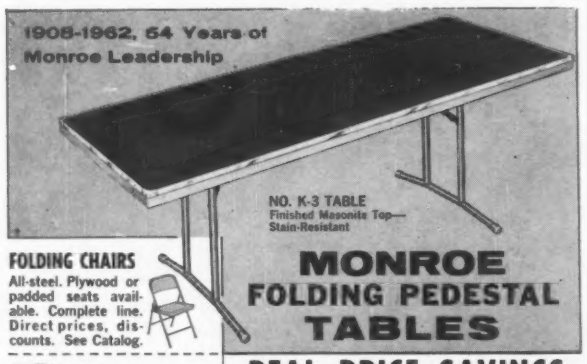
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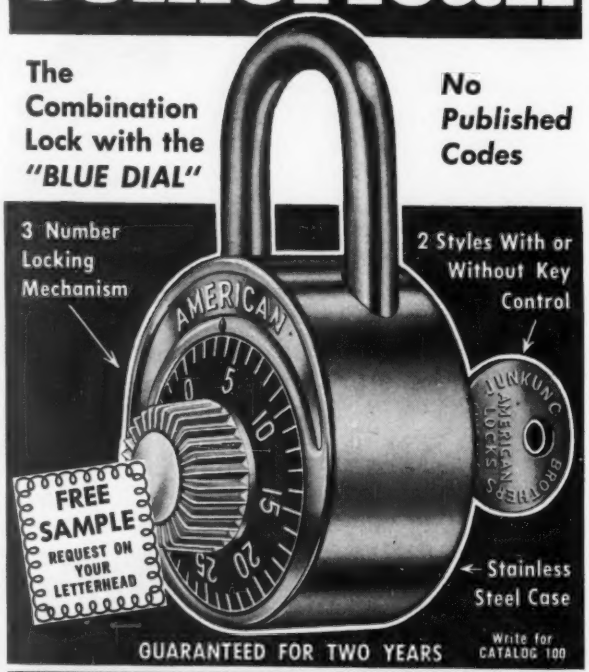

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his agency could not provide the funds without drastically cutting other important projects. At least half of the 1,800 Africans (all from south of the Sahara) came here with no government support and little or no private backing.

Many who thought they had full scholarships later discovered only part of their tuition was paid. Most had to earn money for books, room, board, travel, and incidental expenses. Those who brought money or counted on receiving help from home found the cost of living far higher than expected.

Totem Pole

The "hero" of the American college student is the doctor, with the lawyer running a close second, according to a five-year study made by two Michigan State University psychologists. Doctors were rated highest in the four areas thought to be most important: cultured intellect, material and social success, sociability, personal and political responsibility.

Lawyers, business executives, college professors, and high school teachers were rated next in that order. Scientists, engineers, businessmen, and accountants were low on the list. If all conditions, such as salaries, were ideal, however, the students would have rated professors first and high school teachers much higher.

Batting Average

How much is a college education worth in dollars and cents? Dick Joyce, 17-year-old star athlete and *cum laude* graduate of Cheverus High School, Portland, Me., decided it was worth more than the $100,000 offered him by the Boston Red Sox. Dick figured it this way:

The $100,000 in bonus and salary over five years would dwindle to $69,000 after taxes. He has a scholarship to Holy Cross worth $12,000 and the education it would give him, business and education advisors said, is worth at least $50,000.

"That's $62,000 for getting an education nobody ever can take away as opposed to $69,000 for five years of baseball that might or might not prove successful."

Electronic Brain Children

High school students can learn to program and operate electronic computers faster than most adults, says Maureen Smith of the Royal-McBee Corporation. She taught a group of sixteen students, 15 to 17 years old, at Staples High School, Westport, Conn. Miss Smith, whose regular job is teaching computer training courses to adults, said that most of the high school students "picked it up faster than the average adult in training classes."

Clara Schmitz, Staples mathematics instructor, pointed out that computer training "is a necessary thing in today's world. These youngsters will be living with computers." ●

Circle **OV-270** on reply card, last page

For loss of a page this book was lost

For loss of the book a story was lost and for loss of the story a child was deprived learning. Books exist that man may learn and a damaged book with missing thoughts fails to serve that end. The library with the community interest at heart buys books to last — books with sturdy, attractive bindings, books which stay bright and clean and books with pages which will not fall out even after many circulations. The library with the interest of its community at heart buys Bound-to-Stay-Bound Prebound Books with the assurance that as it acquires a strong and lasting collection, so it gathers ideas for the enduring enrichment of readers and future generations.

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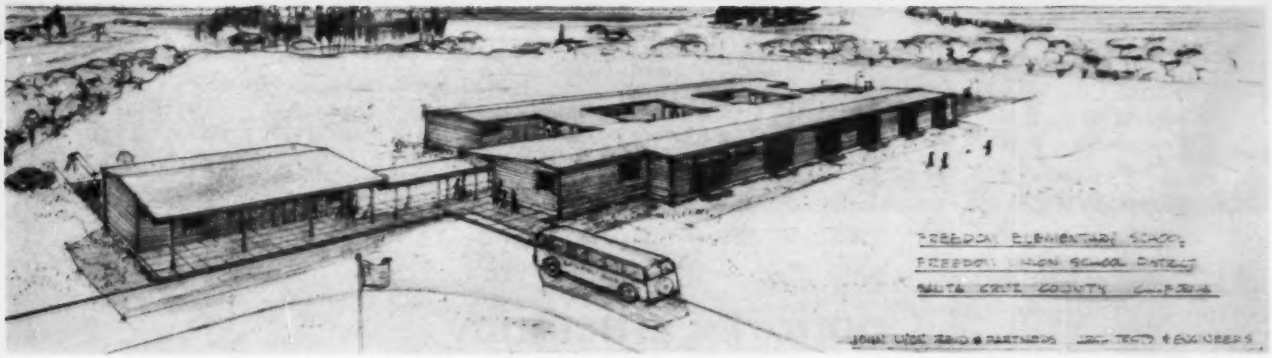
PLANT NEWS

A Step Forward

Okemos, Mich., School District, which began its plant expansion 100 years ago with a one-room building of oak and tamarack, has dedicated a new $1,250,000 high school of gleaming aluminum and glass which features a school-within-a-school design and a specialized learnings building. Looking forward to their next 100 years of progress, the Okemos district instructed Lansing architects Laitala and Nuechterlein to anticipate future changes in education. Flexible spaces in the school can be used for large group instruction, visual aids, TV, small conferences, or individual learning situations. Interior steel partitions are movable and aluminum-and-glass curtain walls and stone-faced precast panels are completely re-usable when additions are made to any building. The structural system and exterior and interior walls are based on a five-foot module which permits interchange of panels, window sections, and door units. Piping and equipment spaces under the building are easily accessible.

Present capacity of Okemos High School is 600, but 1,600 can ultimately be housed when facilities are added according to the architects' master plan. All utilities—water supply, storm and sanitary sewers, electrical service—are sized for the expected total development, and another boiler can be installed in the furnace room. Unit ventilators are used throughout. The 90-acre site, with farm plots, park, landscaped courts, and athletic fields, will become an integral part of the educational complex. Project engineers are Bolton & Helveston; landscape architects are Drew & Skidmore.

Hersey's photos



Low Budget with Lumber

Lumber is an abundant building product in the western states and much school construction reflects this fact. Low-budget Amesti Elementary School, Freedom, Cal., added quality to its design with wood for structure and as a finish material. The frame building for 442 students has a single-loaded corridor on one wing with cross-over corridors to a parallel wing. Classrooms open to the outside with sliding aluminum and glass doors. Each classroom has an individual hot air furnace for chilly days and a fluorescent lighting system built into the ceiling. Amesti was designed by architects Reid Rockwell Banwell & Tarics of San Francisco. Construction cost, including site work: $181,126.

Prototype Residence Hall

Indoor-outdoor design is rare in a multi-story structure, but the six-level coeducational residence hall at University of California at Los Angeles features just that. The entire main floor has walls of glass with sliding glass doors opening onto a walled terrace and open-air dining space. Two rectangular towers give the dormitory a "T" shape. Approximately 400 men students are housed in the south tower, a similar number of women in the north tower. A typical student room measures 11 by 16 feet and has built-in wardrobes, vanity, desks, bookshelves, and convertible sofa-beds. On the exterior, horizontal strips of sliding aluminum-framed windows alternate with beige concrete spandrels. Welton Becket and Associates planned, designed, and engineered the residence hall which is expected to be a prototype for future undergraduate dorms. Construction cost: $3,690,000. ●

PRODUCT PREVIEW

Comfort = Efficiency

GREY PLATE GLASS REDUCES SUN HEAT AND GLARE

A neutral grey polished plate glass which combines brightness reduction with heat absorbing advantages is providing school administrators and designers with an important means of improving environment in today's glass-walled classrooms. The lower light transmission of the grey plate glass provides more comfortable eye conditions because it reduces glare and brightness contrast. It also cuts down the input of the sun's heat, which can bring about a significant cost reduction in the operation of air conditioning equipment.

Two types of grey glass are offered: Parallel-O-Grey, a twin-ground tank plate glass, and Grey Polished Plate Glass, which is conventionally rather than twin-ground. Libbey-Owens-Ford Glass Co., 811 Madison Ave., Toledo, Ohio.

Circle **OV-301** on reply card, last page

COMFORT CONTROL IS "KID-PROOF"

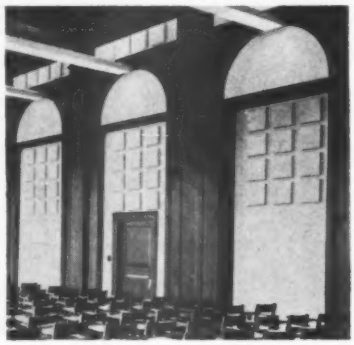
The new Modine School-Vent unit controls comfort by regulating air

flow rather than steam or hot water as in most classroom heating, ventilating and air conditioning units. Because of its inherent economies, it should be looked into by schools operating under a modest budget. The illustration shows youngsters trying out the "kid-proof" features. Modine Mfg. Co., Racine, Wis.

Circle **OV-302** on reply card, last page

SOUND ABSORBING UNITS SOLVE DIFFICULT PROBLEM

Architectural students at Louisiana State University no longer must pay for classroom comfort by being unable to hear their professors. A serious acoustical defect developed when several rooms previously used as library reading rooms were converted into classrooms. The installation of sound absorbing units made of a unique cellular glass material corrected this.

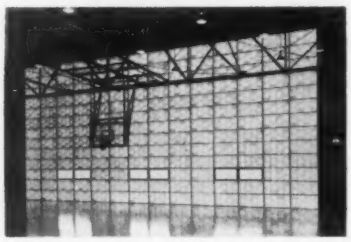


The rooms were treated with units of Geocoustic, applied in patches to the walls and ceilings. The units were set out from the surface on four ½ inch thick pads, leaving a dead space behind each unit. This permitted the back of the unit to function as an absorbing surface and created the effect of a resonant chamber. Pittsburgh Corning Corp., One Gateway Center, Pittsburgh 22, Pa.

Circle **OV-303** on reply card, last page

CURTAIN WALL SYSTEM DIFFUSES DAYLIGHT

Owens-Illinois Thinlite Curtain Wall System offers the architect wide



flexibility in design. The glass panels are available in three types: Thinlite solar-selecting panels, Thinlite Vista (clear) panels and Thinlite ceramic color glass panels. The solar-selecting panels are available in white, green and yellow and are efficient transmitters of softly diffused daylight. The Thinlite Vista panels provide visibility but no light control. The ceramic color glass panels are recommended for non-light-transmitting areas such as spandrels and other veneer uses. They are available in a number of colors.

The illustration shows Thinlite curtain wall used to good advantage in a gymnasium. Owens-Illinois Glass Co., Toledo 1, Ohio.

Circle **OV-304** on reply card, last page

ACOUSTICAL CEILING TILE IS HANDSOME INSTALLATION

Armstrong Fashiontone is a completely new incombustible acoustical ceiling tile that combines the elegant appearance of costly mineral ceiling materials with the installation ease of wood fiber tile. Equipped with a self-leveling tongue-and-groove joint, the material can be stapled to wood furring strips or cemented to an exist-

ing ceiling. The deep textured design is enhanced by the fact that the face edges of the tile can be butted tightly together to provide a continuous ceiling texture. Available in 12″ × 12″ × 5/8″ tile size. Armstrong Cork Co., Lancaster, Pa.

Circle **OV-305** on reply card, last page

HIGHER LIGHTING LEVELS WITH COMFORT

is the unique advantage of the semi-indirect HQ fixture that features 800 ma high output and 1500 ma very high output lamps. The fixtures are supplied with stems and canopies for pendant mounting approximately 18″ below ceiling. Shielding available in 45° × 45° plastic louvers or diffuse polystyrene panels. Sylvania Lighting Fixtures, Wheeling, W. Va.

Circle **OV-306** on reply card, last page

INSULATED SKYLIGHT ENDS HEAT LOSS AND CONDENSATION

The Wasco Twin Dome is a completely sealed, insulated, all-acrylic

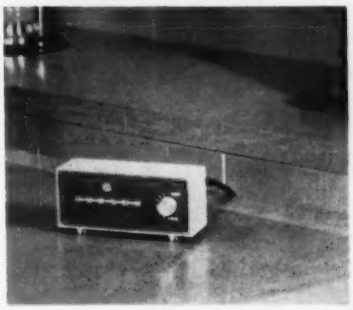
skylight with a low silhouette, that can be nailed directly to the roof deck. A uniform one-inch, hermetically sealed dead air space between the domes acts as a highly efficient thermal barrier and eliminates condensation.

The unit is offered in any combination of clear colorless, white translucent and reflective inner and outer acrylic domes—allowing maximum control of light levels and heat gain. The domes range in size from 20″ × 20″ to 64″ × 96″ and are available in both self-flashing and curb-mounted models. Wasco Products Dept., American Cyanamid Co., Bay State Rd., Cambridge 38, Mass.

Circle **OV-307** on reply card, last page

DESK THERMOSTAT PROVIDES PERSONAL CONTROL OF TEMPERATURE

It is now possible for a person to dial his own comfort merely by reach-



ing over to a smartly styled desk thermostat. The Execustat is ideally suited to executive administrative offices and conference rooms. The instrument is pneumatically operated and readily adapted to any space temperature control application. The Powers Regulator Co., Dept. AU-11, 3400 Oakton St., Skokie, Ill.

Circle **OV-308** on reply card, last page

HEATING AND VENTILATING UNITS OFFER GREAT DESIGN FLEXIBILITY

Carrier heating and ventilating units afford extreme flexibility in the selection of controls and matching accessories to meet application and design conditions. Sectionalized components such as filter frames or boxes, outside air intakes and mixing boxes, louvered outlets and discharge plenums, are simply and easily applied to basic bypass or non-bypass units. The base unit arrives at the job site factory-assembled, the accessories individually crated, for easy handling. Complete package cuts installation time and expense.

A complete selection of steam or hot water coils for each of the seven basic unit sizes makes it practical and economical to match heating and ventilating needs to individual job requirements. Carrier Air Conditioning Co., Syracuse, N. Y.

Circle **OV-309** on reply card, last page

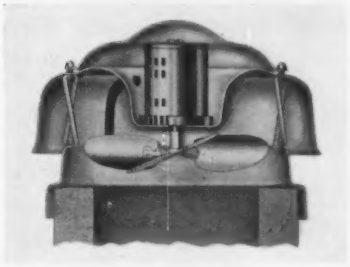
UNIT VENTILATOR SYSTEM FOR YEAR-ROUND COMFORT

The Her-Nel-Cool Unit Ventilator systems are flexible installations which provide heating, ventilation and outdoor-air cooling during winter months and keep room temperatures cool and inviting in the summer. An interesting facet of these units is that they permit the architect to design a more compact school. Low-cost back-to-back classroom design is one of the possibilities. School Air Systems Div., American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky.

Circle **OV-310** on reply card, last page

VENTILATORS COMBINE HIGH EFFICIENCY, LOW COST

A new series of axial blade ventilators, Swartwout Axial Fiber-Aire, in-



cludes nine different units with capacities from 1220 to 4580 CFM at 0″ static pressure. A number of important advantages stem mostly from their fire-retardant fiberglass housings. They withstand physical and chemical abuse that would ruin most metal housings; weather, salt spray, most chemicals and fumes leave them unharmed.

The vibration-absorbing ability of fiberglass, plus stainless steel air flow guides, reduce noise and vibration to new lows for this type of ventilation. Swartwout Fabricators, Inc., Kokomo, Ind.

Circle **OV-311** on reply card, last page

Circle OV-300 for more information on all environment control equipment reviewed on pages 92–93.

PRODUCTS OF SPECIAL INTEREST

BUILT-IN COMBINATION LOCK FOR LOCKERS

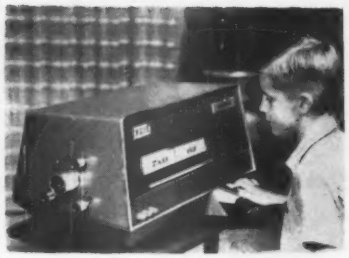
Master Lock's No. 1630 has a number of features to appeal to the

administrator. The combination can be changed quickly and automatically without loosening or removing the lock. A novel push-button device in the back of the lock case allows for an automatic and amazingly fast change of combinations, which have been pre-assigned, when the proper control key is inserted and turned. All combination changes have been conveniently pre-recorded at the factory on a chart for school officials, eliminating hours of tedious administrative work in recording new combinations. Security is improved because the combination changes are scrambled and not mathematically related to each other. Master Lock Co., Milwaukee 45, Wis.

Circle **OV-312** on reply card, last page

MEMORY TUTOR COMPLEMENTS TEACHING MACHINE

The MemoTutor is a machine that is designed to present information in the form of associated pairs, such as dates, figures, sums, words and symbols, which students must commit to memory. This unit, together with the AutoTutor, forms the first multi-purpose team of teaching machines so far available. It is expected that while a student is learning a course in a given subject on the AutoTutor, he may at one point turn to the Memo-



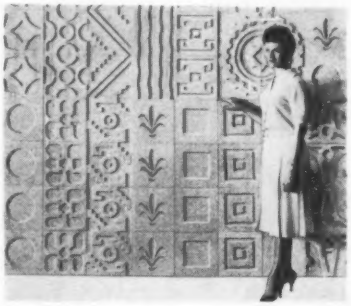
Tutor and drill himself on basic definitions or equivalents that he must know by heart in order to apply the principles that he is learning to any specific problem.

The MemoTutor's simple construction enables the learning content to be changed simply by substituting one sheet of paper for another. A number of basic sets of information, ranging from multiplication tables to the Morse code, will be obtainable from the manufacturer, but the individual in charge of programming will be encouraged to transcribe his own information fitting the material to be memorized—a simple matter on MemoTutor paper, which is ruled for typewriter spacing. U. S. Industries, Inc., 250 Park Ave., New York 17, N. Y.

Circle **OV-313** on reply card, last page

SCULPTURED WALL BLOCKS

Interesting contemporary wall blocks, sculptured with deep-cut de-



signs, offer decorative acoustical wall elements in textured wood fiber Tectum. Both cameo and intaglio patterns are cut in 1″ blocks, 12″ × 12″ in size. A choice of colors and fifteen standard designs provide the designer with exciting new materials. Easily applied to any smooth wall with modern adhesives or by nailing. Tectum Corp., Decorative Div., 535 E. Broad St., Columbus 15, Ohio.

Circle **OV-314** on reply card, last page

ALL TRANSISTORIZED TAPE RECORDER

School administrators on the go will find the Webcor Microcorder the answer to their tape recorder problems. This lightweight, portable, unit is just the thing for recording while traveling. The unit is an all transistor battery operated model although both AC and DC converters are available as accessories. Webster Electric Co., Racine, Wis.

Circle **OV-315** on reply card, last page

MAP SHOWS NEW AFRICAN NATIONS

A new map of Africa, formed in raised relief, is made of a plastic so

tough you can walk on it. Mount Kilimanjaro stands up nearly an inch in relief on the 45″ x 49″ map.

Of the 47 African nations shown, 21 are new nations, established in the past five years. Printed in 10 colors, the map shows nearly 1500 geographical names. Aero Service Corp., 210 E. Courtland St., Philadelphia 20, Pa.

Circle **OV-316** on reply card, last page

PORTABLE SCREEN FOR OVERHEAD PROJECTION

The improved Da-Lite Vidio "A" projection screen has a new feature designed to eliminate "keystone" distortion of the image from overhead projection. A keystone eliminator bar holds the top of the projection screen from 2″ to 18″ away from the vertical position. This easy-to-use accessory eliminates the narrow-bottom-wide-top image distortion common with overhead projection on a vertical screen.

The Vidio "A" is available in

50" x 50", 60" x 60" and 70" x 70" sizes with either mat white surface or White Magic glass beaded surface. All sizes have wide range adjustments. The case can be set from a low at the tripod leg bracket to a high at the top of the center tube. The sturdy chrome plated extension tube can be set at maximum height, with the keystone eliminator in use, without bowing. Da-Lite Screen Co., Inc., Warsaw, Ind.

Circle **OV-317** on reply card, last page

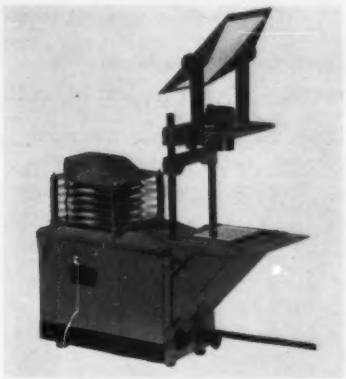
"MACHINE THAT TALKS BACK"

An advanced type of language laboratory uses a "reflection" technique which enables the student to hear his voice "reflected" to him immediately after imitating the model voice. This system makes the equipment a promising tool not only for foreign language instruction but also in remedial reading courses and in speech and drama departments. Other advantages are simplified manual controls and the elimination of long delays and troublesome rewinding of tape. A specially designed projector synchronized with the language laboratory system to aid in visual instruction has been incorporated into several of the Reflection Language Centers. Reflection Educational Products, 1564 Miramonte Ave., Los Altos, Calif.

Circle **OV-318** on reply card, last page

OVERHEAD PROJECTOR

The Keystone Overhead Projector is a teaching lantern-slide device. It projects standard lantern slides and, with proper attachments, two-inch slides, strip film, microscopic slides and Tachistoslides. Its short-focus lens enables the instructor to operate it in front of the group. The overhead feature makes it possible for the teacher to face the group, while



pointing out on the slide itself any items of special interest.

It has a motor-driven cooling system that eliminates the danger of over-heating. Likewise the condensing system is protected from excessive heat and breakage. Cooling of the lamphouse, and consequent possibility of using a 750-watt or a 1000-watt lamp, makes it really a daylight projector. Keystone View Co,. Meadville, Pa.

Circle **OV-319** on reply card, last page

TABLET ARM FOLDING CHAIR

A new tablet arm folding chair, so designed that it remains open and standing even when the desk portion

is folded out of the way, is available from Howe Folding Furniture, Inc. Called the Howe 101, the chair's tablet arm rests compactly at the chair side when not in use.

An all-steel safety lock secures the tablet arm in the desk position automatically. The tablet arm is folded merely by flipping it upward and letting it drop. Howe Folding Furniture, Inc., 1 Park Ave., New York 16, N. Y.

Circle **OV-320** on reply card, last page

STACKING ARM CHAIR

A sturdy, simple-line arm chair, suitable for lounge use, has been designed by The Howell Co. Comfort comes from the poly foam cushioning which is covered with bright colors of Naugahyde vinyl upholstery that is abrasion and scuff resistant, won't stiffen or crack, and is easily washed with soap and water.

The welded, one-piece frame is square tubular steel finished in a satin chrome semi-gloss surface. Chairs can be stacked. The Howell Co., Contract Dept. OV, St. Charles, Ill.

Circle **OV-321** on reply card, last page

COMBINATION METALS SAW AND GRINDER

Promacut Uni-14SA, multi-purpose cut-off saw and pedestal grinder, provides manual training shops with

safe, high-speed, production equipment at moderate price. It cuts carbon and stainless steel dry—requires no coolant. It possesses an extremely high safety factor as there is no chance of blade breaking or shattering. The work does not have to be held down or clamped as the angle of approach of the saw holds it in position. Straight cuts, mitres, notches and incisions can be made by either free-hand or table cutting. Production Machinery, Inc., 4941 W. Belmont Ave., Chicago 41, Ill.

Circle **OV-322** on reply card, last page

SIGHT AND SOUND

audio-visual aids to make teaching more dynamic.

Entertaining and Informative Film on the Baking Industry

"Crackers by the Billion" is a full-color film journey into the ultra-modern world of scientific food processing. It is a spectacular demonstration of present-day cracker and cookie production methods. Recommended for social studies, general science and homemaking classes. 16mm, sound, color. 27 minutes. Free. Public Relations Dept., National Biscuit Co., 425 Park Ave., New York 22, N. Y.

Circle **OV-401** on reply card, last page

School Planning with Wood

A special showing can be arranged of National Lumber Manufacturers Assn.'s new 22-minute color motion picture on school planning with wood. National Lumber Manufacturers Assn., Wood Information Center, 1319 18 St., N.W., Washington 6, D. C.

Circle **OV-402** on reply card, last page

The Tape Recorder and Speech Training

"The Next Voice You Hear" is a 13-minute color film which shows speech clinicians and teachers using the Monitor E-5 dual track tape recorder for intensive speech drills with pre-recorded exercise materials. Available free from Electronic Teaching Laboratories, 5034 Wisconsin Ave., N.W., Washington 16, D. C.

Circle **OV-403** on reply card, last page

Tips on Language Lab Teaching on Tape

Called "Behind the Tape—the Teacher," this professionally written and recorded tape is available for the nominal cost of $2.25. Emphasizing the importance of well-programmed lessons, the tape presents samples of structured pattern drills, as well as opinions of experienced language laboratory teachers. Accompanying each tape is a free 20-page lesson guide of drills. Minnesota Mining and Mfg. Co., Dept. El-333, St. Paul, Minn.

Circle **OV-404** on reply card, last page

Background of Iron Curtain Crisis

"Living in the Iron Curtain Countries Today" is the title of a new seven filmstrip series. Color photographs taken just before the latest restrictions graphically portray current conditions in East Germany, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia. Companion piece to the new series is "Living in the Soviet Union Today," which explores life and conditions in Russia proper. Society for Visual Education, Dept. 61-6, 1345 Diversey Parkway, Chicago 14, Ill.

Circle **OV-405** on reply card, last page

How Efficient is Your School Cafeteria?

"Menu for Growth" is a new 16mm color film which dramatizes the essentials for a soundly planned and engineered school cafeteria. Narration covers how to take advantage of government-donated foods offered in the National School Lunch Program, the importance of sound menu planning, proper selection and purchase of foods and practical record-keeping. Available free on request except for return mailing charges. G. S. Blodgett, Inc., Burlington, Vt.

Circle **OV-406** on reply card, last page

Landmark Books on Records

The popular Landmark series are now being recorded on 12" 33⅓ unbreakable records. Forty-four are now available with more to come. They may be secured "on loan for evaluation and preview." Enrichment Teaching Materials, 246 Fifth Ave., New York 1, N. Y.

Circle **OV-407** on reply card, last page

Circle **OV-273** on reply card, last page

Harriton High School of Lower Merion, Rosemont, Pa.
ARCHITECT: Vincent G. Kling, F.A.I.A., Philadelphia
CITATION: 1960 AASA School Building Architectural Exhibit

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PRODUCT LITERATURE

These free booklets offer much up-to-the-minute information.

ETV Systems at Nominal Cost

Sarkes-Tarzian, Inc. is prepared to show how the basic equipment needed for ETV can be furnished at nominal cost to meet individual school requirements. Educational Television Dept., Broadcast Equipment Div., Sarkes Tarzian, Inc., East Hillside Dr., Bloomington, Ind.

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Wall-Type Folding Table and Bench Sets

A new folder by Rol-Fol shows their popular folding table and bench line. Storage is managed quickly and easily in wall pockets of 18 gauge steel construction. In addition, the units may be detached and rolled anywhere. Rol-Fol Table, Inc., 8467 Melrose Place, Los Angeles 46, Calif.

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Laboratory Furniture Aids in Planning

Kewaunee's new 92-page catalog is brimful of the latest in functionally-designed educational science furniture. It is designed to be a planning aid with complete specifications and dimension drawings. Request "Wood Educational Laboratory Furniture, Section 5, 1961 Edition." Kewaunee Mfg. Co., Adrian, Mich. and Kewaunee Technical Furniture Co., Statesville, N. C.

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Lower-Priced Unit Added to Air Conditioning Line

"Product Bulletin No. D-100" describes the construction, operation, performance, and dimensions of a new, budget-priced line of central station air conditioning equipment. Many quality features are offered, such as sectional construction, which provides flexibility to meet practically any installation need. American Air Filter Co., Dept. PD, 215 Central Ave., Louisville 8, Ky.

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Schoolrooms Need Not Be Drab

From the chemistry lab to the gym, proper colors are recommended for painting walls, ceilings, floors, furniture, stair wells and corridors. Color combinations are suggested for rooms facing various exposures. Information on chemical-resistant paints for lab tables is given as well as protective, heavy duty paints for desks, chairs, lockers, cabinets and other furniture subjected to heavy wear. Tropical Paint Co., Cleveland 2, Ohio.

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Practical Lab Experience in Electronics

The DeVry Electronics Trainer, described in a new booklet, takes only a limited space, functions well in teaching students many practical principles of basic electronics. The student can quickly set up circuits following pictorial schematic templates which slip easily into position under the see-through DeVry Circuit Panels. Paromel Electronics Corp., 3956 Belmont Ave., Chicago 18, Ill.

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Language Lab Testing Techniques

The requirements for oral laboratory testing are set forth in a new brochure, "Oral Testing, a Yardstick for Learning." Considerations are given to students' motivation, student reward, programming of test questions, and the handling of dual channel magnetic tape or magnetic disc in the student recording equipment. Thompson Ramo Wooldridge Inc., 532 Sylvan Ave., Englewood Cliffs, N. J.

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Cabinets are Colorful, Movable

Harmon Classroom Cabinets consist of a broad line of over 200 classroom storage facilities. The 50-page catalog includes complete specifications. Each cabinet is a complete unit and can be moved from

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room to room to meet changing needs. Harmon Cabinets, Inc., 1933 Dock St., P. O. Box 1464, Tacoma 1, Wash.
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Guard Against Fire, Theft and Vandalism

"Investigative & Guard Service in Colleges and Universities" is a new brochure which explains Pinkerton's services. This famous agency will assign trained men to protect and supervise social and athletic events, registrations and re-unions. Pinkerton's National Detective Agency, Inc., 100 Church St., New York 7, N. Y.
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Everything for the Lunchroom

An illustrated ordering catalog features food service needs such as china, glassware, silver-plated and stainless steel table flatware, trays, towels, chairs, tables, pots, pans, cutlery, and many other items. Edward Don & Co., 2201 S. LaSalle St., Chicago 8, Ill.
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Decorative Glazed Spray Finish

Vitra-Spray is a vitreous, glazed wall finish that is attractive, washable, impact-resistant and economical. It may be mottled and textured in many different colors that are permanent and non-fading. This product works very well for such school and college applications as corridor walls, classroom walls, laboratories, baths and shower rooms, kitchens, etc. Production Paints & Coatings, Inc., 110 Wallabout St., Bklyn., 11, N. Y.
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Language Laboratory on Wheels

A new four-page folder describes RCA's low-cost mobile language laboratory unit. The lab rolls into the classroom, plugs into an ordinary wall outlet and is ready for operation. Accommodates 10 students for language teaching, speech therapy or other instruction. Educational Electronic Products, RCA Telecommunication Center, Meadow Lands, Pa.
Circle **OV-512** on reply card, last page

Control Keys with Color

ColorCap is a new system of keeping order among a number of keys—ten colors and an all-steel cabinet end a vexing problem. Saxton Barrett Co., ColorCap Div., P. O. Box 1508, Altadena, Calif.
Circle **OV-513** on reply card, last page

Efficient System for Locating, Identifying Educational Tapes

Ampex has issued a helpful booklet on how to identify and locate educational tapes through color coding and other Ampex accessories. Audio Visual Dept., Ampex Magnetic Tape Products, Orr Industries Co., P. O. Box 190, Opelika, Ala.
Circle **OV-514** on reply card, last page

How to Go About Fund-Raising

"Patterns of Successful Fund-Raising" is a guide to the organization of a successful fund-raising campaign. Based on 48 years of experience, including hundreds of school and college campaigns. A copy may be obtained from American City Bureau, 3520 Prudential Plaza, Chicago 1, Ill.
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The Wonderful World of Glass

"Look at Living in the Open World" is an attractive brochure which shows how LOF glass products are enhancing day-to-day living in schools, homes and office buildings. Libbey-Owens-Ford Glass Co., 811 Madison Ave., Toledo 1, Ohio.
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Adjustable Shelving Eliminates Dead Spaces

Hallowell adjustable shelving is discussed in a comprehensive new 36-page catalog. The adjustable feature frequently adds much usable storage area by eliminating dead air storage. Standard Pressed Steel Co., Jenkintown, Pa.
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Tape Recorders and How to Use Them

"207 Ways to Use a Tape Recorder" suggests many ways to get more mileage out of your unit. A special section is devoted to school use. Magnecord Sales Dept., Midwestern Instruments, Inc., P. O. Box 7509, Tulsa 18, Okla.
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FABRI-FORM
school trays...

...your LOW COST answer to classroom storage problems!

Schools everywhere are solving their classroom storage problems *economically* with Fabri-Form school trays. These trays store student's materials INDIVIDUALLY in home economics, kindergarten, science and chemical labs, art or work-shops, and have many other miscellaneous school storage uses.

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- Beautiful pale tan, grey or green colors

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